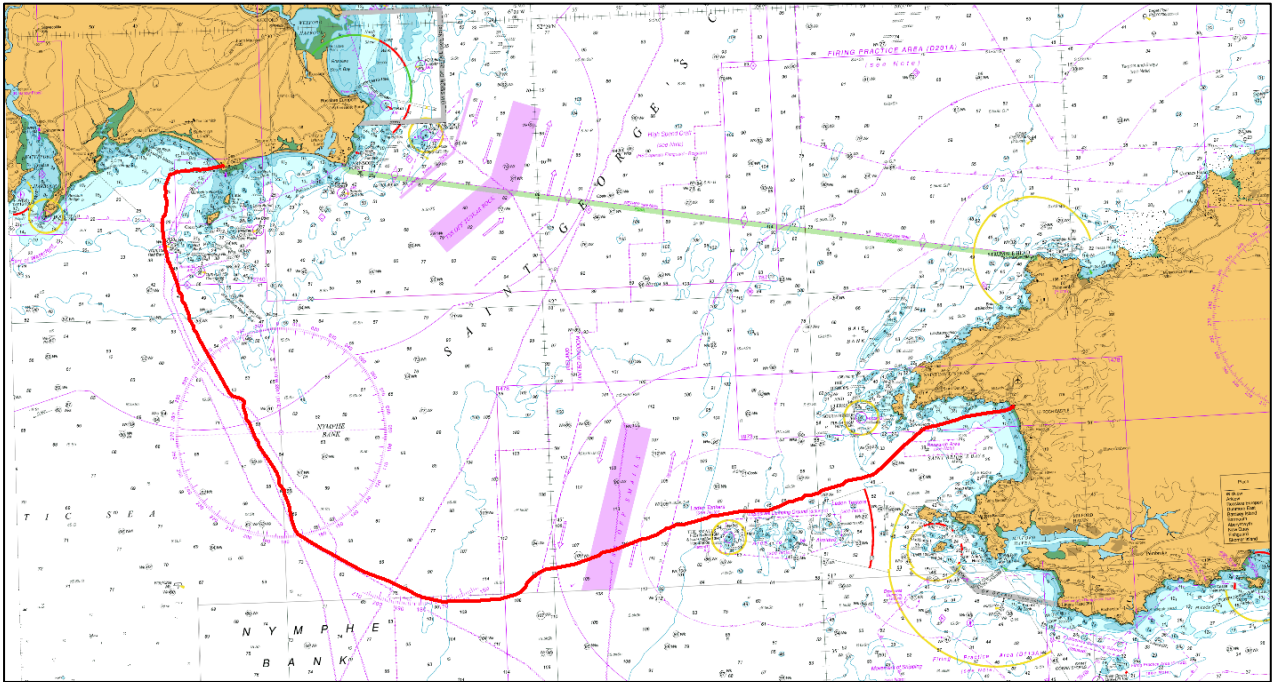


BEAUFORT CABLE SYSTEM



NON-STATUTORY ENVIRONMENTAL REPORT



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DOCUMENT CONTROL SHEET

CLIENT	Amazon MCS Ireland Limited					
PROJECT TITLE	Beaufort Cable System					
PROJECT REFERENCE	1354					
DOCUMENT TITLE	Non-Statutory Environmental Report					
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EXECUTIVE SUMMARY

i. Amazon MCS Ireland Limited is applying to land the new high-capacity Beaufort submarine fibre-optic cable system in Kilmore Quay, Co. Wexford; linking Ireland to the UK. The Beaufort system will be jointly developed and operated with Microsoft to provide next generation diverse connectivity between Ireland and the UK with onward connectivity to Continental Europe. When fully operational, the cable will support high quality, robust and resilient access to international telecommunications networks - a key driver in social, economic and industrial growth, supporting the development of the region and of Ireland as a whole as outlined in the National Marine Planning Framework.

ii. The existing subsea cable systems in the Celtic Sea linking Ireland and the UK are approaching end of life as they date from the year 2000 and earlier. More recent cable builds between Ireland and the UK have focused on routing directly into Dublin from the Northeast of England and Wales. The new Beaufort system will help ensure the long-term security of communications and resilient connectivity for Ireland and the UK. The system will make use of existing infrastructure such as ducts and the cable landing compound in Kilmore Quay. The system will land in the UK at a landfall in Newgale, Wales.

iii. The Beaufort fibre optic cable is 33mm in diameter and will be “un-repeated” (i.e. not powered). It is to be an industry-standard optical fibre cable. The cable will be double armoured in Irish waters.

iv. Beaufort Cable System will re-use the existing ESAT-1 landfall infrastructure at Ballyteige Burrow to the northwest of Kilmore Quay. This includes the duct to sea beneath the dune system, the Beach Manhole, the fronthaul duct from the Beach Manhole to the Cable Landing Station and the Cable Landing Station.

v. This report provides an overview of the environmental impacts and mitigations resulting from the installation of the Beaufort Cable System between the Irish 12 nautical mile (12nm) limit and the boundary of the Irish Exclusive Economic Zone (EEZ). This report has been produced by MDM as part of a planning application for the Beaufort Cable System that will be submitted to An Comisiún Pleanála in 2026.

1.0 INTRODUCTION

1.1 Amazon MCS Ireland Limited is planning to construct a new subsea fibre optic cable system to replace an out-of-service cable and upgrade connectivity in the southern sea corridor between Ireland and the UK. The planned cable will extend from Kilmore Quay on the southeast coast of Wexford in Ireland to Newgale, Pembrokeshire on the southwest coast of Wales. The overall scheme is referred to as the Beaufort Cable System and the route configuration is shown in Figure 1.

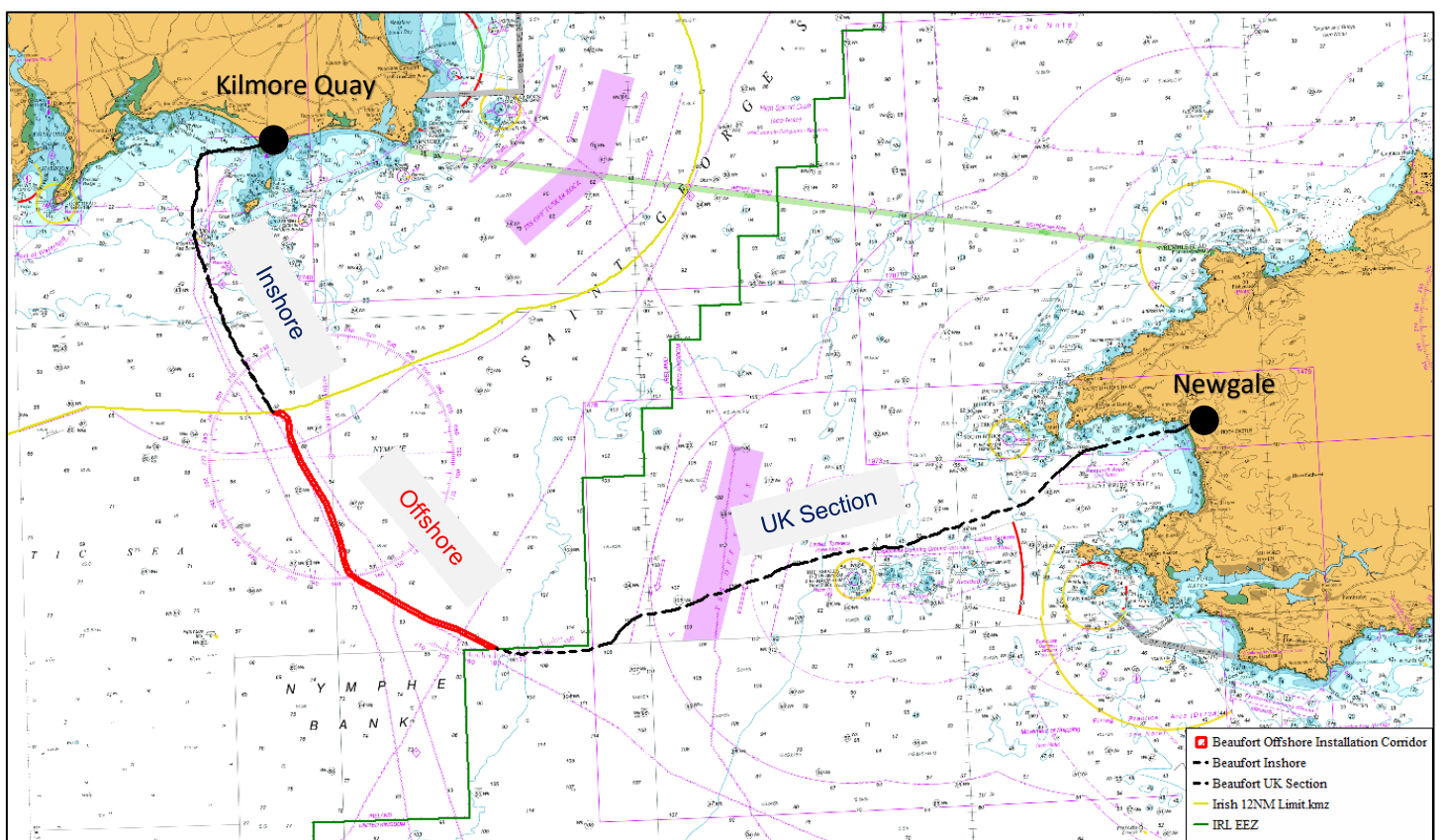


Figure 1: Beaufort Cable System

1.2 The planned system is comprised of three segments which are defined as follows:

- Inshore Kilmore Quay to Irish 12nm Limit - Granted permission under Foreshore License FS007361 on 29/11/2023.
- Offshore Irish 12nm Limit to Irish EEZ Boundary – Granted a Maritime Area Consent (MAC240030) by the Maritime Area Regulatory

Authority (MARA) in late 2025. This segment will be the primary focus of this report.

- UK Section EEZ Boundary to Newgale – An application for a Marine Licence to install the Beaufort cable in UK waters has been submitted to Natural Resources Wales (NRW), ref: CML2606.

The landfall duct at Kilmore Quay, Wexford has been granted planning permission by Wexford County Council on 25/03/2025 – Application Reference Number: 20250330.

1.3 The Beaufort Cable installation corridor between the Irish 12nm limit and the EEZ boundary, as licensed under MAC240030, is 38.5 km in length, 400m width with a total area of approximately 15.38 km². A map of this installation corridor is shown in Figure 2 and a Route Position List (RPL) with corresponding coordinates is presented in Table 1.

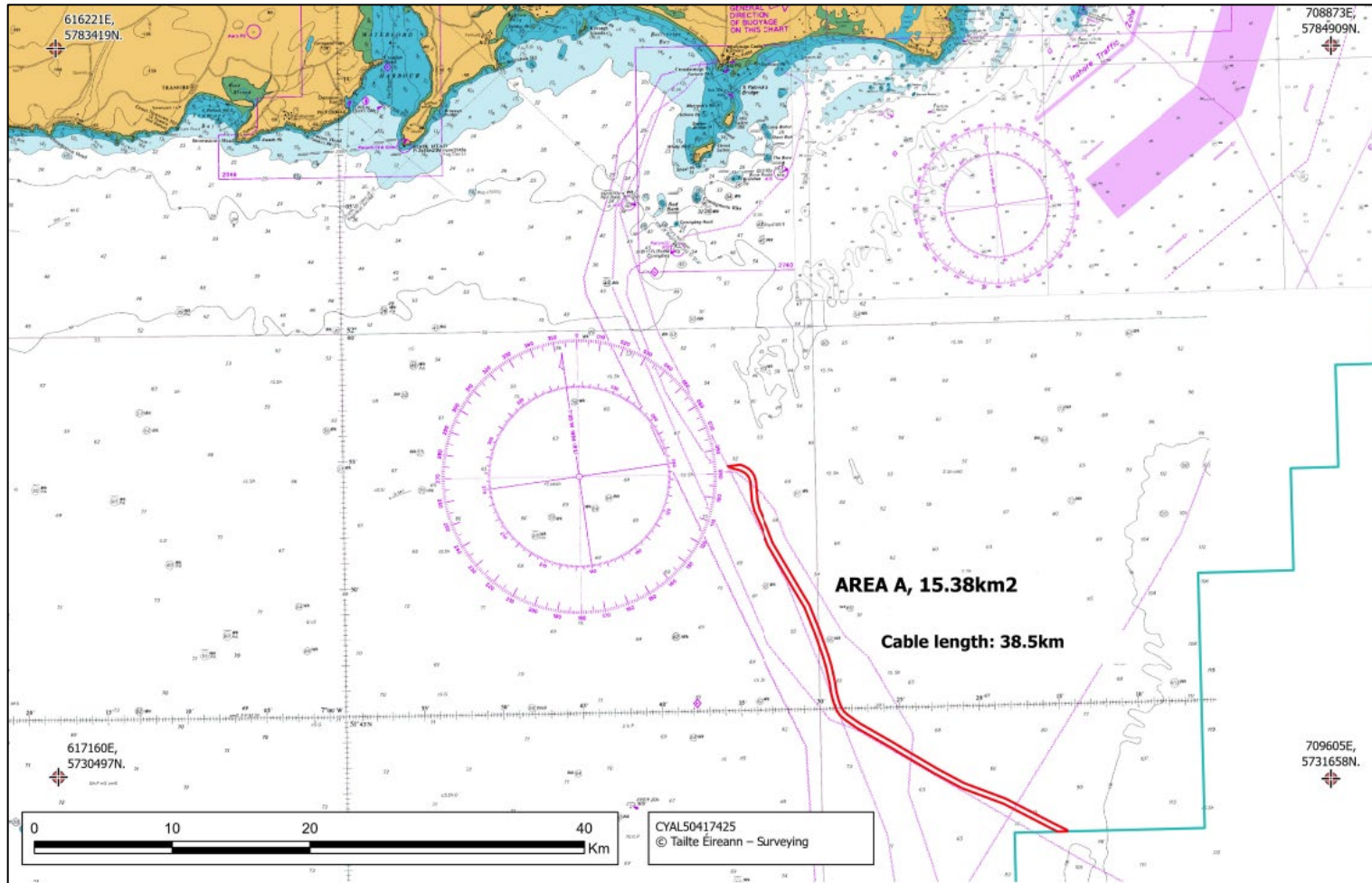


Figure 2: The Beaufort Cable Installation Corridor between Irish 12nm Limit and EEZ Boundary

Beaufort IRL Offshore Installation Corridor RPL			
ID	LATITUDE	LONGITUDE	COMMENT
1	51° 54' 35.3826" N	6° 35' 37.2180" W	IRL 12NM Limit
2	51° 54' 36.2943" N	6° 35' 21.7787" W	IRL 12NM Limit
3	51° 54' 37.7038" N	6° 35' 01.6170" W	IRL 12NM Limit
4	51° 54' 38.6017" N	6° 34' 50.6195" W	IRL 12NM Limit
5	51° 54' 34.5993" N	6° 34' 34.7132" W	
6	51° 54' 28.6861" N	6° 34' 19.0584" W	
7	51° 54' 20.9485" N	6° 34' 06.7819" W	
8	51° 54' 11.1139" N	6° 33' 57.6221" W	
9	51° 53' 59.5495" N	6° 33' 52.4391" W	
10	51° 53' 45.6884" N	6° 33' 51.0768" W	
11	51° 53' 14.1252" N	6° 33' 47.9203" W	
12	51° 52' 53.7233" N	6° 33' 40.7627" W	
13	51° 52' 37.1581" N	6° 33' 29.3758" W	
14	51° 52' 10.7185" N	6° 33' 11.4243" W	
15	51° 51' 33.3104" N	6° 32' 49.4773" W	
16	51° 49' 36.5792" N	6° 31' 03.5939" W	
17	51° 49' 05.5611" N	6° 30' 35.0001" W	
18	51° 48' 02.9995" N	6° 29' 57.0942" W	
19	51° 47' 06.0227" N	6° 29' 27.1952" W	
20	51° 46' 41.1144" N	6° 29' 16.3548" W	
21	51° 46' 00.1548" N	6° 29' 03.4950" W	
22	51° 45' 40.7520" N	6° 28' 59.8563" W	
23	51° 45' 21.0376" N	6° 28' 52.2292" W	
24	51° 45' 19.8445" N	6° 28' 51.7652" W	
25	51° 45' 02.1295" N	6° 28' 41.4627" W	
26	51° 44' 52.8960" N	6° 28' 31.8361" W	
27	51° 44' 44.7599" N	6° 28' 17.6373" W	
28	51° 44' 24.8686" N	6° 27' 34.0552" W	
29	51° 43' 39.8560" N	6° 25' 33.8987" W	
30	51° 43' 21.6075" N	6° 24' 47.6985" W	

31	51° 43' 10.3905" N	6° 24' 18.7566" W	
32	51° 42' 34.0198" N	6° 22' 44.9476" W	
33	51° 41' 59.0889" N	6° 21' 05.5635" W	
34	51° 41' 20.2014" N	6° 18' 29.8712" W	
35	51° 41' 04.2676" N	6° 17' 43.2754" W	
36	51° 40' 25.3143" N	6° 15' 49.1535" W	
37	51° 40' 22.5346" N	6° 15' 41.4168" W	
38	51° 40' 02.7628" N	6° 14' 41.4159" W	
39	51° 40' 00.1217" N	6° 14' 43.6674" W	IRL EEZ
40	51° 40' 00.1071" N	6° 15' 17.8010" W	IRL EEZ
41	51° 40' 11.2094" N	6° 15' 51.4998" W	
42	51° 40' 14.0380" N	6° 15' 59.3727" W	
43	51° 40' 52.9247" N	6° 17' 53.3022" W	
44	51° 41' 08.4850" N	6° 18' 38.8063" W	
45	51° 41' 47.4001" N	6° 21' 14.6130" W	
46	51° 42' 22.8923" N	6° 22' 55.5957" W	
47	51° 42' 59.4103" N	6° 24' 29.7868" W	
48	51° 43' 10.6569" N	6° 24' 58.8060" W	
49	51° 43' 28.8536" N	6° 25' 44.8762" W	
50	51° 44' 14.0909" N	6° 27' 45.6363" W	
51	51° 44' 34.7597" N	6° 28' 30.9234" W	
52	51° 44' 44.4933" N	6° 28' 47.9111" W	
53	51° 44' 56.3414" N	6° 29' 00.2648" W	
54	51° 45' 16.1174" N	6° 29' 11.7682" W	
55	51° 45' 18.0082" N	6° 29' 12.5038" W	
56	51° 45' 38.4847" N	6° 29' 20.4284" W	
57	51° 45' 58.1664" N	6° 29' 24.1218" W	
58	51° 46' 38.1865" N	6° 29' 36.6917" W	
59	51° 47' 02.3312" N	6° 29' 47.2027" W	
60	51° 47' 58.7194" N	6° 30' 16.7997" W	
61	51° 49' 00.0404" N	6° 30' 53.9611" W	
62	51° 49' 30.2000" N	6° 31' 21.7671" W	
63	51° 51' 27.8940" N	6° 33' 08.5376" W	

64	51° 52' 05.9988" N	6° 33' 30.8978" W	
65	51° 52' 32.1171" N	6° 33' 48.6343" W	
66	51° 52' 49.7817" N	6° 34' 00.7791" W	
67	51° 53' 12.3418" N	6° 34' 08.6967" W	
68	51° 53' 44.8955" N	6° 34' 11.9564" W	
69	51° 53' 57.4039" N	6° 34' 13.1874" W	
70	51° 54' 06.0746" N	6° 34' 17.0746" W	
71	51° 54' 13.0597" N	6° 34' 23.5810" W	
72	51° 54' 18.4766" N	6° 34' 32.1761" W	
73	51° 54' 23.0070" N	6° 34' 44.1703" W	
74	51° 54' 26.3966" N	6° 34' 57.6414" W	
75	51° 54' 29.8986" N	6° 35' 18.9298" W	
76	51° 54' 30.3472" N	6° 35' 20.8519" W	
77	51° 54' 35.3826" N	6° 35' 37.2180" W	
78	51° 54' 35.3826" N	6° 35' 37.2180" W	

Table 1: Route Position List – Beaufort Offshore Installation Corridor

2.0 PROJECT BACKGROUND

2.1 The original concept was for the Beaufort Cable system route to follow the line of the ESAT-1 cable (licensed under foreshore licence FS004585 and decommissioned under foreshore licences FS007361) southwards from the landfall at Kilmore Quay.

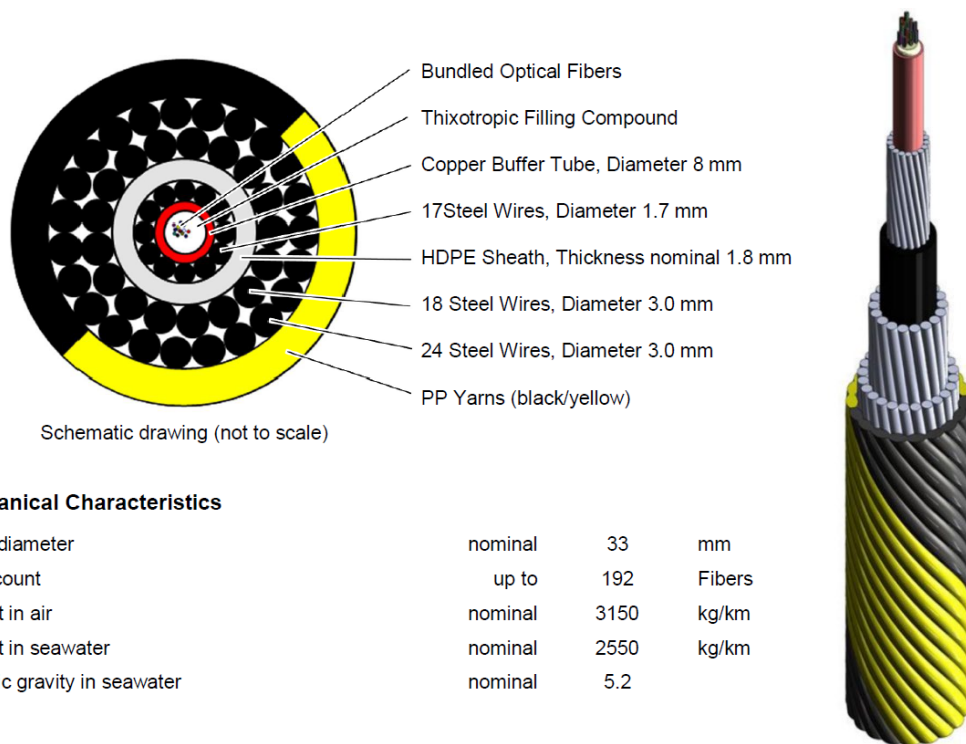
2.2 The As-Laid records for the ESAT-1 cable have been made available by BT Ireland and these provide background information for the installation of the planned Beaufort Cable. The survey information is supplemented by further and more recent material, as outlined in Paragraph 2.3 and the overall material provides an enhanced database for the installation of the planned Beaufort Cable System over a substantial portion of the route.

2.3 The data covering the northern section of ESAT-1, together with the remainder of the route, is further supplemented by the following additional material

- Offshore Seabed Geomorphology.
- Bathymetry, Sidescan Sonar, Magnetometer and Sub-Bottom Profile survey data from cable route surveys commissioned by Amazon and Microsoft.
- Seabed Sediment and Bed-form data.
- Landfall features.
- Admiralty Chart Data.
- Inventory of Wrecks.
- Inventory of existing cables.
- Inventory of marine installations and licence blocks.
- Marine Archaeological Assessment.
- AA Screening and Natura Impact Statement
- Ecological Impact Assessment.
- Other data in the public domain.
- Specific experience from the installation of the ESAT-1 and UK-IRL Crossing 1&2 cables.

Cable Specification

2.4 The NSW MINISUB DA 192 has been chosen for the Beaufort project. The fibre optic cable will be 33mm in diameter and will be “un-repeated” (i.e. not powered). It is to be an industry-standard cable with the capability to transmit high-speed data and voice via light waves through the 72 optical fibre pairs contained within the core Unit Fibre Structure (UFS). The cable will be double armoured (DA) in Irish waters, and a cut-away section of the cable is shown in Figure 3.



Mechanical Characteristics

Outer diameter	nominal	33	mm
Fiber count	up to	192	Fibers
Weight in air	nominal	3150	kg/km
Weight in seawater	nominal	2550	kg/km
Specific gravity in seawater	nominal	5.2	
Minimum bending radius with load		1000	mm

Figure 3: NSW MINISUB DA 192 Specification

2.5 The UFS is the innermost element of the cable and consists of 72 optical fibre pairs embedded in a buffer gel material inside a copper buffer tube. The buffer gel is a thixotropic material that protects the optical fibres from shear stresses associated with movement inside the tube. Ultra-high strength steel wires are helically wrapped around the UFS and together they act as a pressure vessel that protects the UFS from stresses greater or equal to 100 MPa. The interstices between the steel wires are filled with a hydrophobic elastomeric water-blocking material which resists longitudinal water ingress. A thin layer of ethylene-acrylic and copolymer plastic resin and a thick

layer of polyethylene insulating jacket are co-extruded over the copper sheath. This HDPE sheath provides insulation, abrasion resistance and corrosion protection.

2.6 The double armour, consisting of two layers of galvanised wire wrapped around the cable, is coated with hot-blown asphalt and wound with polypropylene yarn. The finished DA Cable has an outer diameter of 33 mm.

3.0 CABLE INSTALLATION METHODOLOGY

3.1 The principal objective of the main lay installation works is to successfully deploy the fibreoptic cable along the proposed route, obtaining the required burial depth to protect the system from external aggression and provide for a safe and secure system, with due regard for environmental, archaeological and ecological considerations.

Sub-Sea Cable Installation

3.2 The Beaufort Cable System will feature a direct landing at Kilmore Quay. The Main Lay Vessel will bring the cable toward the shoreline until reaching the designated landing point. An inshore installation team will be in place to bring the cable ashore. Once the cable is securely landed, the required termination and testing activities will be completed onshore. The Main Lay Vessel will then proceed to deploy and bury the cable in the seabed. The burial tool is operated from and powered by the Main Lay Vessel and is designed to bury the cable at a depth such that the cable will be secure from fishing activities. The target burial depth of 1.5m is subject to reasonable endeavours and where the seabed geology allows.

3.3 Typical burial speed is generally of the order of 0.5 knots and is dependent on the stiffness of the seabed sediment. There is no significant noise generation during burial operations. Cable installation produces only a minor plume of suspension of seabed sediments in the water column, and this is transient and localised due to the nature of the burial and natural backfill activities.

3.4 Typical subsea cable burial tools used to simultaneously install and bury fibre optic cables in the seabed include cable plough (passive and jet assisted) or jetting trenchers (sled or self-propelled). The Nexans CAPJET jetting trencher will be deployed for the installation of the Beaufort cable system

3.5 The Nexans CAPJET system is a remotely operated jetting trencher developed to bury subsea cables and pipelines into the seabed. It uses high-pressure focussed water jets to fluidize the sediment beneath the cable, allowing it to settle into a trench without mechanical cutting. The CAPJET is capable of:

- Trenching to depths of up to 3 m, depending on soil conditions.
- Operating in waters up to 2,000 m deep.
- Performing in a variety of seabed types, from soft sediment to harder soils, with adjustable jet pressure (10–16 bar) and thrust.

It integrates multiple sensors (video cameras, sonar, gyros, pressure sensors) for precise control and real-time monitoring. The system’s modular design enables different trenching configurations — for flexible pipelines, steel flowlines, and cable burial.

3.6 In the context of this project the CAPJET will be used to simultaneously lay and bury the Beaufort cable by forming a narrow trench (approx. 150mm) of fluidised seabed using a bespoke jetting sword into which the cable is installed to the target depth through the cable depressor. The seabed sediment is displaced temporarily to form the trench during the burial operation and then allowed to re-form naturally and ‘backfill’ the trench after the passage of the jetting tool. The CAPJET will be powered and controlled from the cable installation vessel via electrical umbilical. A visual representation of the CAPJET system is shown in Figure 4 .

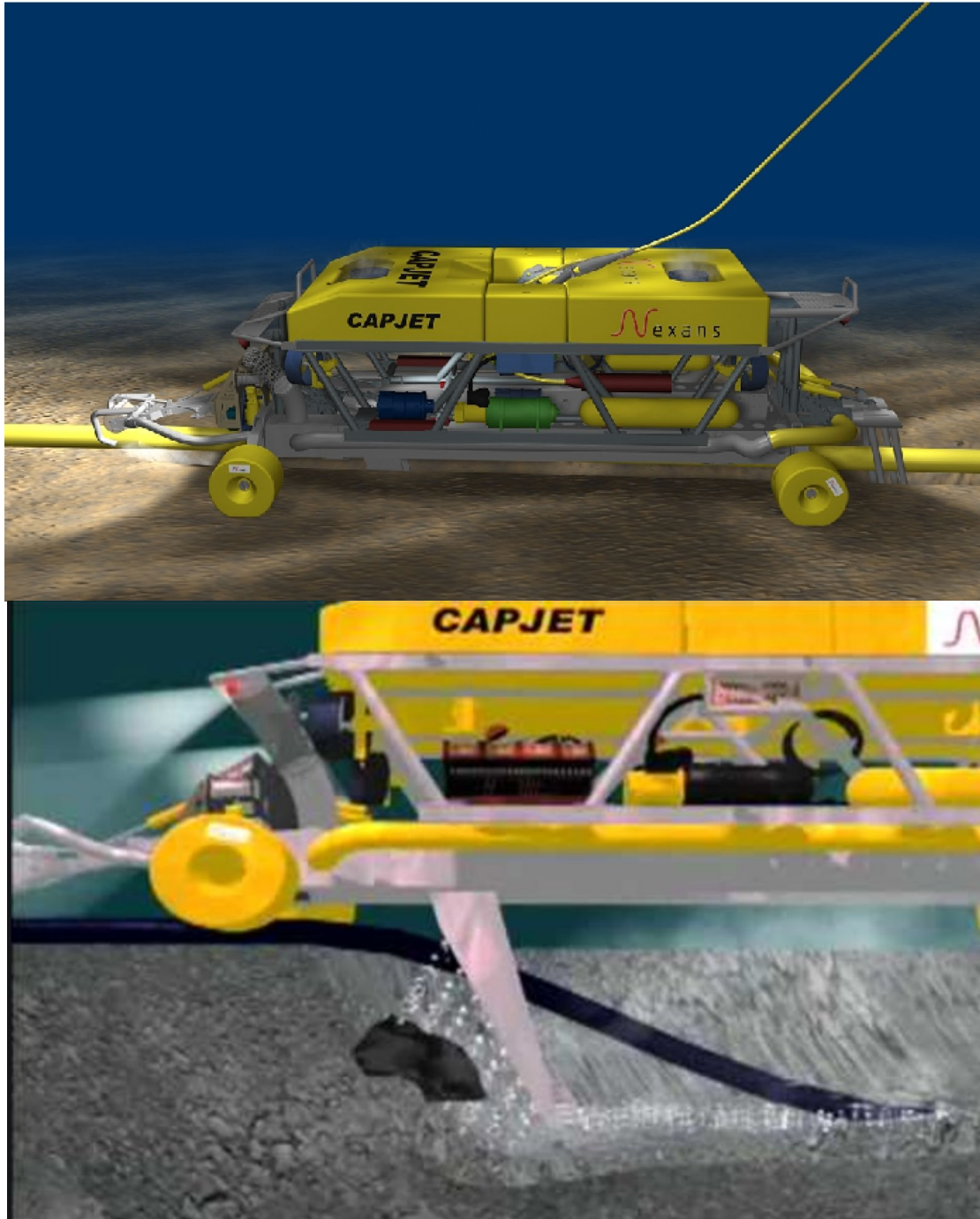


Figure 4: Nexans CAPJET Burial Tool

3.7 The target burial depth for the Beaufort cable system is 1.5 metres. In areas of stiff soil, the actual burial depth may be reduced but is planned to be still at a depth which will protect the cable from fishing operations and generally not less than 1 metre. Where seabed geology prevents burial such as areas of rock or reef, the cable will be directly laid on the seabed surface.

Post Lay Operations

3.8 Following main lay operations, post-lay inspection and burial (PLIB) may be carried out in certain areas to inspect the proper laying and burial of the cable in the seabed. A post-lay burial operation may be performed in order to supplement the burial operations in the following instances:

- Planned recoveries of the burial tool
- Initial and final splice positions within the buried sections – Post-Lay Inspection and Burial is planned for the initial splice location between the Pre-Lay Shore End and main lay section of the cable to 1.5 metre target burial depth.
- Unplanned recoveries due to burial tool breakdown, adverse weather, etc.
- Surface-laid sections due to burial tool malfunction where the burial tool is not brought back on board.

3.9 In limited areas requiring post-lay burial, the CAPJET system is also utilized. As described previously, the CAPJET uses a jetting burial tool to bury the cable to the required depth. The seabed is emulsified in the localised region of the burial, and a narrow trench is formed. The CAPJET system slowly moves along the seabed on the required cable track forming a narrow trench into which the cable is placed. The seabed sediment is displaced temporarily to form the trench during the burial operation and then allowed to re-form naturally and ‘backfill’ the trench after the passage of the CAPJET’s burial tool.

3.10 It should be noted that the surrounding seawater is used for the jetting system, i.e. nothing alien is introduced into the environment. The burial tool does not remove any seabed materials from the area. The CAPJET burial operation is controlled from the main vessel and monitored in real time using high-definition video cameras and imaging sonar mounted on the vehicle.

Subsea Crossings

3.11 The proposed route between the Irish 12nm limit and the EEZ boundary entails a total of 4 subsea crossings of existing in-service telecoms cables and an electrical interconnector. Further details of the crossings are shown in Table 2 below.

Name	Type	Position	Water Depth	Latitude	Longitude
UK-IRL Crossing 1	Telecom	KP 41.9	55m	51° 53' 45.5170" N	6° 34' 01.9208" W
Greenlink Interconnector	Electrical Interconnector	KP 58.8	60m	51° 45' 20.6984" N	6° 29' 02.1085" W
UK-IRL Crossing 1	Telecom	KP 65.8	66m	51° 43' 04.2921" N	6° 24' 24.1696" W
Hibernia Atlantic	Telecom	KP 74.4	76m	51° 40' 59.1939" N	6° 17' 47.6817" W

Table 2: Subsea Crossings within Installation Corridor

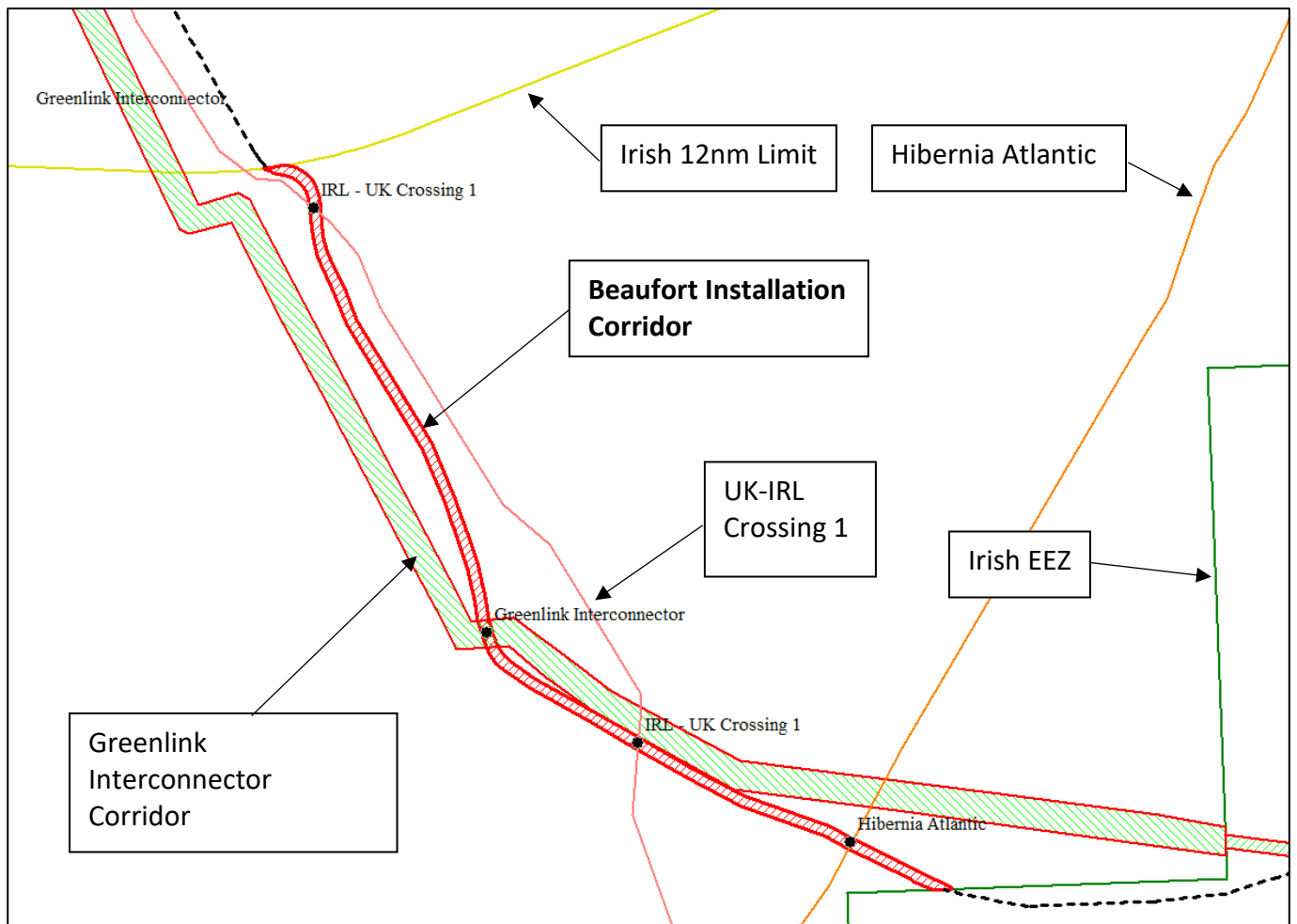


Figure 5: Subsea Crossings in Vicinity of Beaufort Route

In Service Telecoms Cables

3.12 As highlighted in Table 2, the Beaufort cable has 3 crossings over in-service telecoms cables between the Irish 12nm limit and the EEZ boundary, crossing the Ireland-UK Crossing 1 twice and Hibernia Atlantic Seg D once. Crossing agreements will be put in place with the respective cable owners to allow the in-service cables to be crossed directly with the jetting sword in free-float mode. This enables both the crossed cable and the installed cable to be jetted to depth and precludes the need for pre and post crossing works.

3.13 The following methodology will be implemented at the cable crossings: the cable lay speed will be reduced when the cable lay vessel is approaching the crossing. At 20 m from the crossing the sword will be put in the free-floating mode. In the free-floating mode, the sword is pointing 45 degrees downwards, it is not locked in this position, and it will slide over obstructions as illustrated in Figure 6 below. In this mode the sword will trench the cable and the crossed product to a burial depth of approximately 1 metre. CAPJET cannot damage the crossed cable as the trenching method used is high pressure, focussed, water jetting. If requested by the 3rd party asset owner, further cable protection such as cast-iron shells, Uraduct, plastic shells or silicon sleeves can be installed from the installation vessel if requested by the 3rd party asset owner.

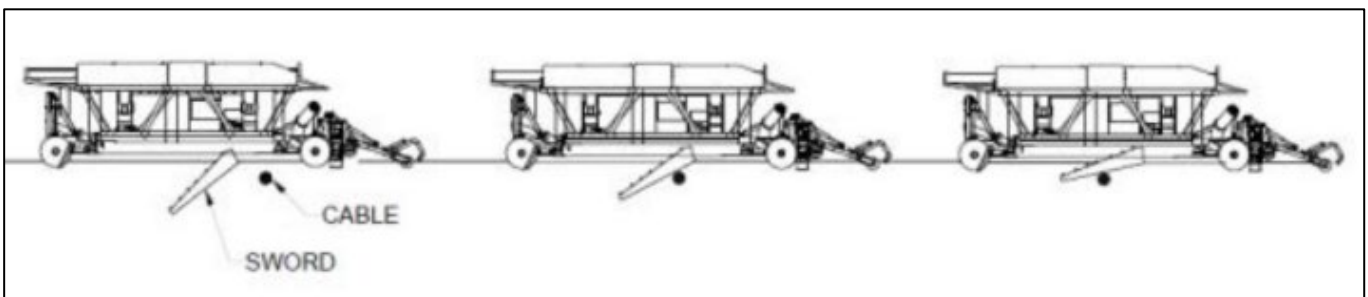


Figure 6: CAPJET in Free Floating Mode when Crossing a Cable

Greenlink HVDC Interconnector Cable

3.14 The Greenlink Interconnector is a submarine power cable running from Baginbun Beach, Co. Wexford (east side of the Hook peninsula) to Freshwater West,

Pembrokeshire, Wales. It was installed in 2025, and its overall route is similar to that of Beaufort (shown in Figure 5). The Beaufort cable route will cross the Greenlink Interconnector at: $51^{\circ}45'20.6984''N$, $6^{\circ}29'02.1085''W$.

3.15 The preliminary crossing design for the Greenlink Interconnector intends to use the same Uraduct crossing cable protection and design as used in in-service telecom cable crossings. Should this not be agreeable with the Greenlink Interconnector owners, alternative forms of crossing protection will be explored. This may involve pre-lay crossing construction. This may involve the installation of an articulated concrete mattress over the crossing point of the interconnector cable (as shown in Figure 7) prior to the main lay cable installation. The interconnector cable is buried at the crossing location. The dimensions of a concrete mattress are 3.0m x 6.0m x 0.45m and the leading edge of each mattress is tapered for hydraulic stability and for cable installation. The Beaufort cable will then be laid over the concrete mattress. The exact crossing design will be confirmed following further consultation with the owners of the Greenlink Interconnector.



Figure 7: Articulated Mattress

3.16 A summary of the pre-lay crossing construction works is as follows:

- It will be required to install additional protection on the Beaufort cable at the Greenlink crossing. This protection will be a product such as Uraduct, which is

specialized polyurethane ducting designed to wrap around the cable thus reducing the chance of abrasion damage.

- The concrete mattress required for the interconnector crossing will be loaded onto the Offshore Construction Vessel at the port of mobilisation. A pre-installation inspection will be undertaken at the crossing location including confirmation of crossing positioning and burial depth.
- The concrete mattress will be installed on the seabed using the vessel crane and a mattress installation frame with touchdown monitoring. The installation location will also be verified via beacons mounted on the installation frame. The mattress installation frame slings will be released, and the frame recovered to the deck.

3.17 A marine notice will be issued by the Fisheries Liaison Officer once the concrete mattresses have been installed to notify marine users. A Guard vessel may be positioned at the crossing location from the time of laying the cable until the completion of post-lay rock placement. Fishermen will be informed of the works, and the crossing locations and regular contact will be maintained with fishing fleets during this time.

[Post-Lay Greenlink HVDC Interconnector Crossing Operations](#)

3.18 If required, the Greenlink HVDC Interconnector crossing will be inspected following the main lay installation and necessary post lay burial activities within the Safety Zone will be undertaken. It is expected that, the Post-Lay Inspection and burial will be undertaken using the Nexans CAPJET burial tool.

3.19 In summary, the Post-Lay Inspection and Burial (PLIB) works are as follows:

- The PLIB vessel will take position at the crossing location.
- The crossing will be inspected by ROV.
- The Nexans CAPJET will be docked on the Beaufort cable at the limit of the Jet Zone, and moving away from the HVDC cable will bury the temporarily surface laid section of the Beaufort cable at a target trenching speed of 400m/hr.

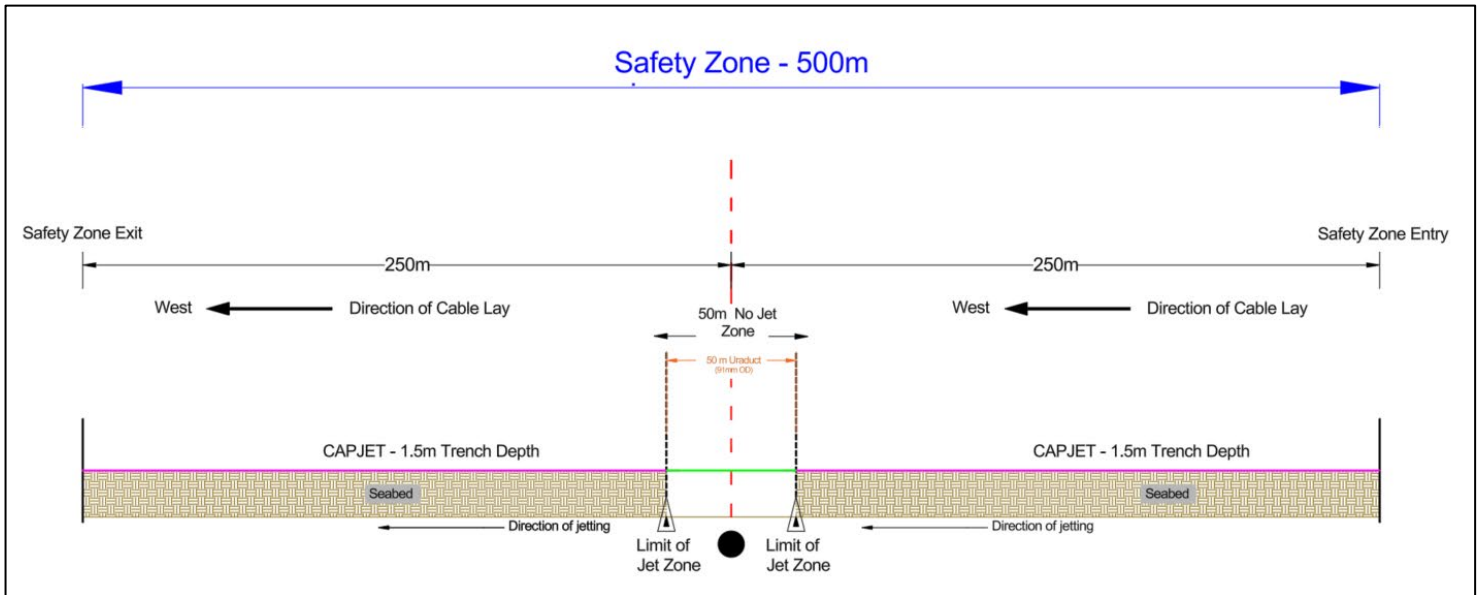


Figure 8: Greenlink HVDC Interconnector Crossing Safety Zone

3.20 Consultation with the owners of the Greenlink Interconnector crossing party is currently ongoing.

[Post-Lay Greenlink Interconnector Crossing Rock Berm Construction](#)

3.21 Should the previously presented Post-Lay proposal not be agreeable with the Greenlink Interconnector owners, additional post-lay construction of a rock berm to protect the Beaufort cable may be required at the Greenlink HVDC Interconnector crossing.

3.22 The rock berm will extend 13.5m along the interconnector axis, centred at the crossing location, and a berm depth of 0.8m. This will cover the pre-lay concrete mattress. The rock berm along the cable axis will be 64m (total length) x 1.5m (top width). (Figure 10 - Figure 13).

3.23 The side slopes will be installed to a 1:3 ratio to provide hydraulic stability and protection from snagging of fishing gear etc. The area of the rock berm is 463m² (including sloped sides) with a total volume of rock of approximately 220m³, accounting for a 10% loss in loose rock placement or discrepancies in the seabed geometry. The rock berm will be constructed with a mix of freshly crushed rock

(granite/gneiss) with a maximum size of between 12 and 20 cm topped with a 20cm layer of smaller armourstone.

3.24 The height of the proposed rock berm will not interfere with navigation, and the crossing and rock placement is designed to be trawled over by fishing vessels.

3.25 A summary of the rock placement works is as follows:

- i. The rock material will be loaded and positioned on the vessel in accordance with its grading and characteristics.
- ii. The vessel hopper will be loaded with the rock.
- iii. The vessel will transit to the crossing location, and the flexible fall pipe will be deployed.
- iv. The vessel will take position over the crossing point and hold position using its Dynamic Positioning (DP) systems.
- v. Rock placement will be undertaken in a controlled manner with the position of the fall pipe 'nozzle' above the seabed adjusted in real time to ensure accurate construction of the rock berm (Figure 9).
- vi. The crossing will be surveyed by the observation ROV and, if successfully completed, the fall pipe will be recovered.

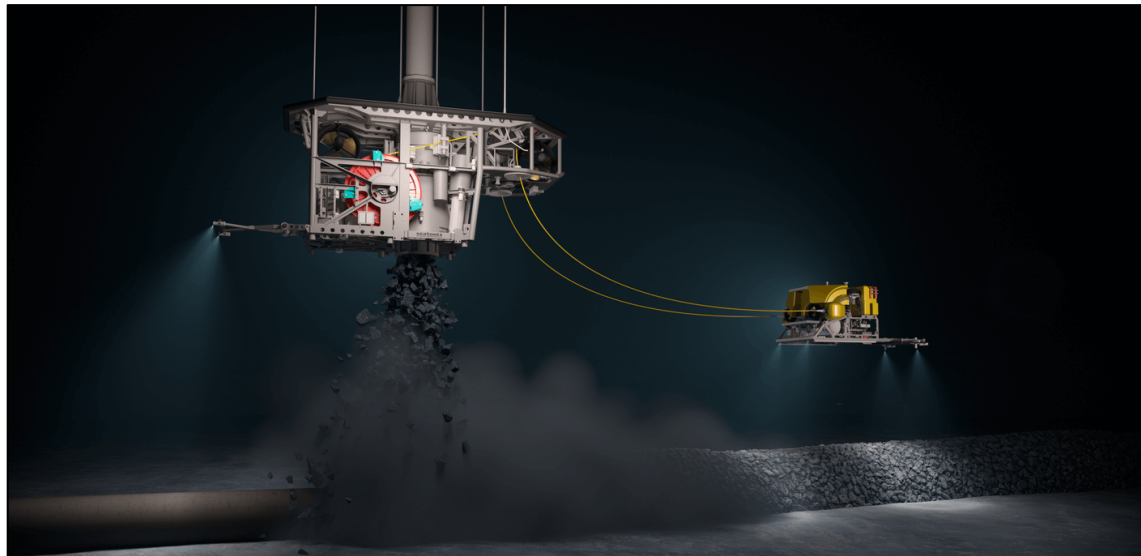


Figure 9: Fall Pipe Discharging Rock

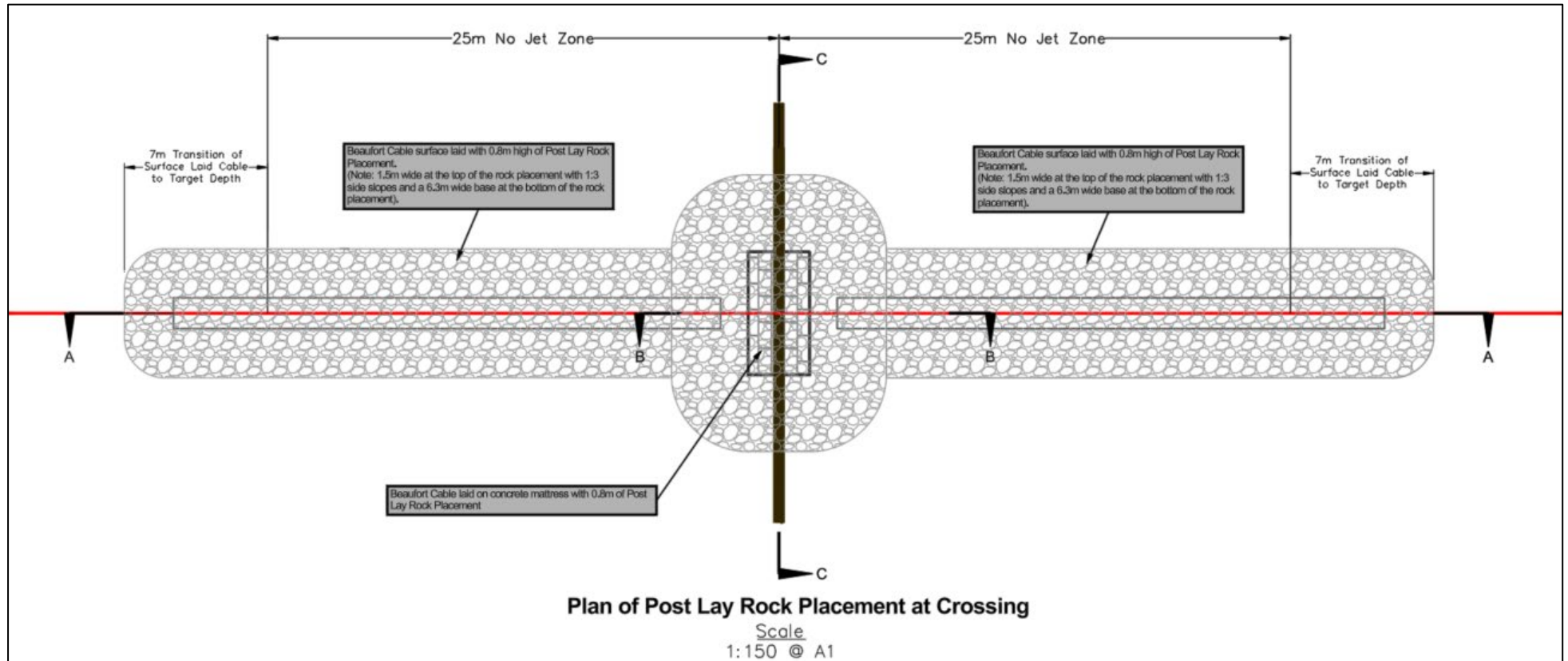


Figure 10: Plan View of Post Lay Rock Berm

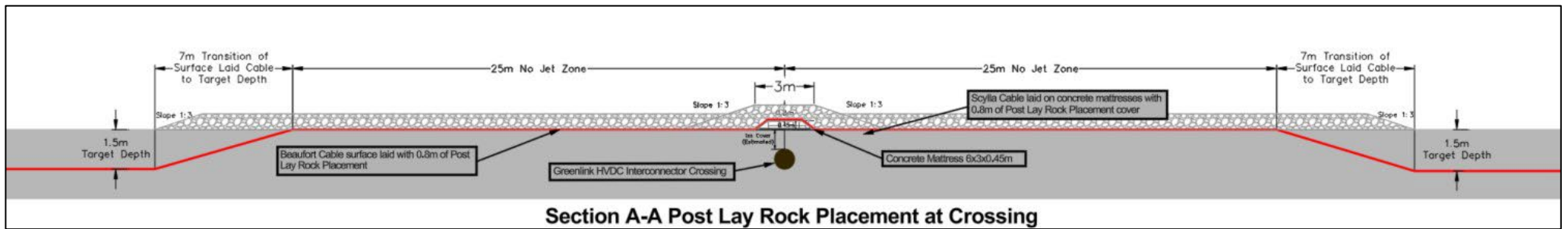


Figure 11: Cross Section A-A of Post Lay Rock Berm

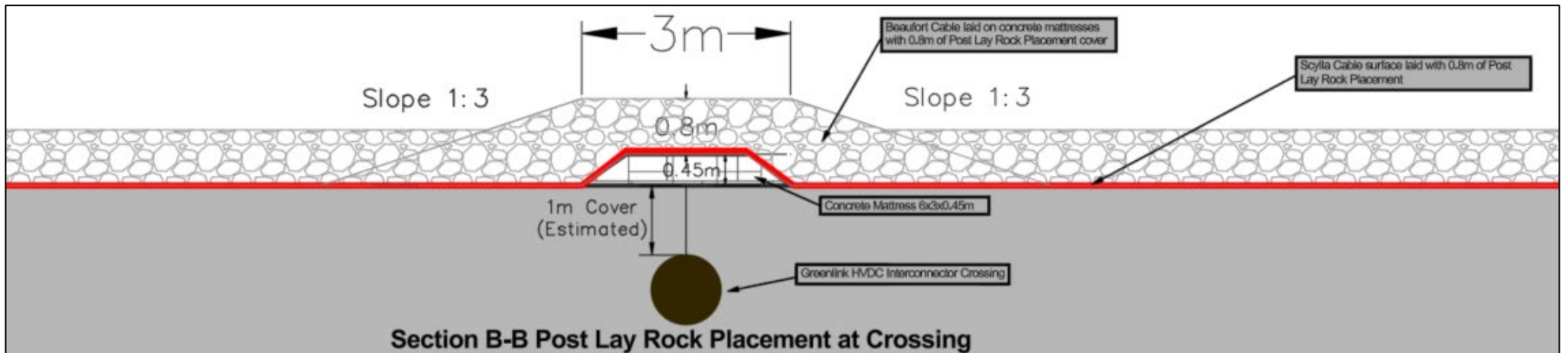


Figure 12: Cross Section B-B of Post Lay Rock Berm

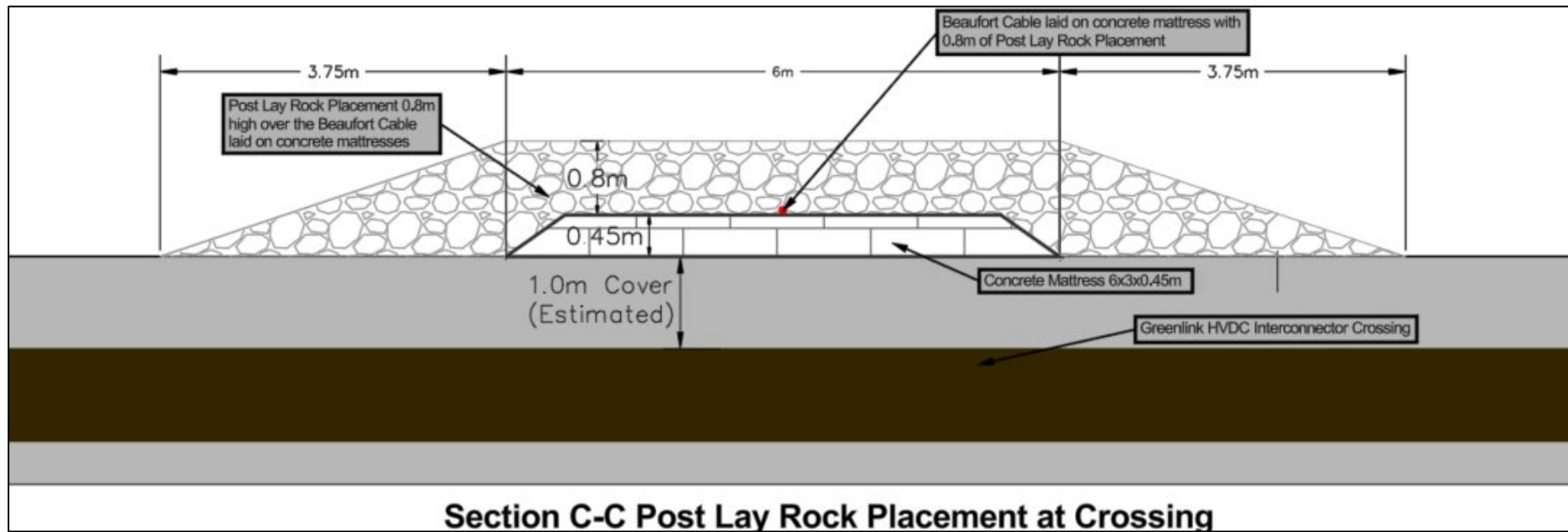


Figure 13: Cross Section C-C of Post Lay Rock Berm

OOS Telecoms Cables

3.26 The Beaufort cable will not cross any out of service (OOS) cables between the Irish 12nm limit and the EEZ boundary.

Ultra-Short Baseline (USBL) Subsea Positioning

3.27 An Ultra-Short Baseline (USBL) is a subsea positioning system widely used by the offshore marine industry and scientific research vessels to accurately track the position of towed equipment and sensors. The USBL system consists of a transceiver mounted to the cable vessel, and transponders on the towed burial tool

3.28 To calculate a subsea position, the USBL calculates both a range and an angle from the transceiver to the subsea beacon. Angles are measured by the transceiver, which contains an array of transducers. The transceiver emits an acoustic signal at predetermined periods (often 0.5 seconds) which is returned by the transponder and allows for the bearing and distance to be calculated.

3.29 USBL systems are designed for close range transmission and thus typically emit pulses of medium frequency sound (20 to 50 kHz). Manufacturers report SPL values of 194 to 207dB re 1 μ Pa at 1m depending on the model used, taking as an example the higher range of USBL source (Kongsberg HiPAP) with a SPL of 207dB re 1 μ Pa at 1m.

3.30 All works that involve the use of acoustic instrumentation such as the USBL will follow the Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (Department of Arts, Heritage and Gaeltacht, 2014).

Cable Installation Vessel

3.31 The main lay installation vessel will consist of a dedicated marine spread which will be suitable for the scope of work required, the water depth and the anticipated seabed conditions of the cable route. The Cecon CLV will be used to carry out the installation works. It is a newly built vessel and is 100m in length, 21m in breadth and can accommodate 100 personnel (consisting of the ship's crew, cable installation personnel and client representatives). A visual representation of the Cecon CLV is shown below.



Figure 14: Cecon CLV

3.32 The cable installation vessel may use a local port with sufficient water draft and quay space for personnel / equipment mobilisation, bunkering and provisioning. All vessels will be fit for purpose, will possess all relevant international and classification certificates and be capable of safely undertaking the installation work required. Health, safety, environment and welfare considerations will be a priority and will be actively managed during cable lay operations.

3.33 Appointed contractors will be required to comply with all legislation relevant to the activities within their scope of work. Prior to installation works taking place, both Project Supervisor for Design Process (PSDP) and Project Supervisor for

Construction Stage (PSCS) will be appointed under the relevant legislation and project specific HSE plans will be put in place which will form part of the project execution plans.

3.34 The cable lay will conform to the following minimum requirements as appropriate:

- Compliance with Safety of Life at Sea (SOLAS), International Maritime Organization (IMO) and national requirements for operating within the Irish territorial waters and EEZ.
- Station-keeping and sea keeping capabilities required to carry out the proposed cable lay operations safely.
- Calibrated equipment and spares with necessary tools for all specified works.
- Endurance (e.g. fuel, water, stores, etc.) to undertake the required cable lay works.
- Sufficient qualified staff to allow the cable lay operations to be carried out efficiently, (typically 24 hour continuous); and
- Appropriate accommodation and crew welfare facilities.

3.35 The cable installation vessel will generate some subsea noise in the marine environment from engine noise and dynamic positioning thrusters. Shipping noise is typically within the 50-300 Hz frequency band and is the dominant noise source in deeper water (DECC, 2011). All vessel propellers have the potential to produce cavitation noise. This sound is caused by vacuum bubbles that were generated by the collapse of bubbles created by the spinning of the propellers.

3.36 Acoustic broadband source pressure levels typically increase with increasing vessel size, with smaller vessels (<50 m) having source pressure levels 160-175 dB (re 1 μ Pa at 1m), medium size vessel (50-100 m) 165-180 dB (re 1 μ Pa at 1m) and large vessels (>100 m) 180-190 dB (re 1 μ Pa at 1m) (DECC, 2011). Every vessel has a unique noise signature and for each vessel this can change in response to several factors,

including ship speed, operational status, vessel load, the condition of the vessel and even the properties of the water that the vessel is operating in.

Estimated Timeline and Duration of Cable Lay Activities

3.37 The intention is to commence the cable installation in Spring 2027 accounting for vessel availability, the overall cable installation programme, seasonality and suitable weather windows. The exact mobilisation dates will not be known until closer to the time and once all permits and authorisations are in place in Ireland and the UK. It is anticipated that the main lay operations within the offshore area between the Irish 12nm limit and the EEZ will take less than 2 weeks in total and will be completed over a 2-month period.

4.0 PLANNING & DEVELOPMENT

Statement of Consistency with the National Marine Planning Framework (NMPF)

4.1 The NMPF details how marine-based human activities will interact with each other and the marine environment. It is the marine equivalent of the National Planning Framework. It enables the Irish Government to “direct decision makers, users and stakeholders towards strategic, plan-led and efficient use of our marine resources” (Department of Housing, Local Government and Heritage, 2021). It brings together the various EU Directives mentioned previously to set a clear direction for managing our seas. The project’s adherence to EU Directives, coupled with the localised and temporary nature of the work, ensures that it will be consistent with the NMPF.

4.2 As stated in the Telecommunications chapter of the National Marine Planning Framework (March 2021), guaranteeing existing and future international telecommunications connectivity is critically important to support the future needs of society and enterprise in Ireland. The value of the digital economy in Ireland is estimated at €12.3bn or 6% of GDP and is expected to grow significantly over the coming years. In an increasingly interconnected world, continued investment in sustainable telecommunications connectivity will be critical to ensuring 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.

4.3 Recent developments 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” outlines an increased ambition to further strengthen the international connectivity of the EU including in respect of telecommunications and subsea telecommunications connectivity. ‘2030 Digital Compass: The European way for the Digital Decade’ also sets a vision, targets, and avenues for a successful

digital transformation of Europe by 2030. Europe’s digital leadership and global competitiveness is dependent on strong internal and external connectivity. In that regard, the Commission highlights the importance of improving connectivity with external partners (such as the UK) including via subsea cables.

[Statement of Consistency with the Marine Strategy Framework Directive](#)

4.4 The Marine Strategy Framework Directive (MSFD) is European legislation, which aims to protect the marine environment. It requires the application of an ecosystem-based approach to the management of human activities, enabling a sustainable use of marine goods and services.

4.5 To implement the MSFD, Ireland is required to:

- Describe what they consider is a clean, healthy, and productive sea.
- Monitor and assess the quality of their seas against Good Environmental Status
- Ensure they take appropriate action by 2020 to maintain or achieve Good Environmental Status.

4.6 This process started in 2012, with a review every six years. Marine Strategy Framework Directive habitat mapping was consulted during the preparation of the Ecological Impact Assessment Report (EclA) for this application.

5.0 BIODIVERSITY

5.1 The following section outlines the potential impacts relating to biodiversity, resulting from the installation of the Beaufort Subsea Fibreoptic Cable. These impacts and mitigations are described in more detail in the accompanying environmental reports (NIS, EclA, SISAA, Annex IV).

Seals & Cetaceans

5.2 As outlined by the NPWS, *“Cetaceans account for 48% of all the native species of mammals, both marine and terrestrial, recorded in Ireland and Irish waters are thought to contain important habitats for cetaceans within the northeast Atlantic. To date, 24 species of cetacean, or 28% of species described worldwide, have been recorded in Ireland. Irish cetaceans include six species of baleen whale and eighteen species of toothed whale, including five species of beaked whale. Twenty-two of these have been reported stranded ashore and 20 species observed at sea. Two species (Pygmy sperm whale and Gervais’ beaked whale) are only known from stranded individuals, and two species (Northern right whale and White whale/beluga) have only been recorded historically, with neither species occurring in the stranding record so far. Ireland also has two species of seals, the Common Seal (or Harbour Seal) and the Grey Seal. Whilst both species haul out on land for key stages of their life history, the majority of their time is spent in the marine environment.”*

5.2 The protection afforded to marine mammals in Ireland is summarised below:

- Harbour Porpoise Annex II of EC Habitats Directive Annex IV of EC Habitats Directive/Protected species of Wildlife (Amendment) Act/OSPAR List of Threatened and Declining Species and Habitats
- Bottlenose Dolphin Annex II of EC Habitats Directive/Annex IV of EC Habitats Directive/Protected species of Wildlife (Amendment) Act
- All Cetacea Annex IV of EC Habitats Directive/Protected species of Wildlife (Amendment) Act
- Grey Seal/Harbour Seal Annex II of EC Habitats Directive/Protected species of Wildlife (Amendment) Act

5.3 Recent research suggests that there is the foraging range for grey seals is 448km (Carter et al., 2022). Further, the foraging range for harbour seal is estimated at 273 km (Carter et al., 2022). There are a number of SACs designated for cetaceans (harbour porpoise and common dolphin) in Ireland. As these species are a highly mobile species and designated as qualifying interests of Natura 2000 sites outside the Irish EEZ, specific Management Units (MU) are utilised to assess the potential impacts of a proposed project on these species. Management Units are based on the JNCC Review of Management Unit boundaries for cetaceans in UK waters (2023) methodology. The proposed project is located within the Celtic and Irish Seas MU for harbour porpoise, and the Offshore Channel, Celtic Sea & SW England MU for bottlenose dolphin (IAMMWG, 2015). The Zone of Influence (Zoi) of the proposed project has been extended to include the potential for significant effects on grey seal, harbour seal, harbour porpoise and common bottlenose dolphin as there is potential for these mobile marine mammals to enter the Zoi from within the aforementioned MUs.

Otters

5.4 Otters are a semi-aquatic species who use the marine environment for foraging and are protected under Annex II and Annex IV of the Habitats Directive. As detailed by Reid et al. (2013), female otters have territories of 7.5 ± 1.5 km in length along a riverine environment and 6.5 ± 1.0 km in coastal environments, while male otter territory along rivers is approximately 13.2 ± 5.3 km in length with a high degree of variability. However, given the spatial and temporal nature of the proposed works, and the fact that the nearest point of the Beaufort Offshore Cable Route to the Irish mainland is approximately 29km, the proposed project is considered too distant from Natura 2000 sites where otter is a feature of interest for any significant interaction to occur.

Migratory Fish

5.5 In relation to Atlantic salmon, it has been found that salmon populations from southeast Ireland appear to migrate towards the shelf edge before crossing the Atlantic towards Greenland for feeding (Rikardson et al., 2021). Recent studies on Twaite Shad recorded movement of up to 950km from the River Severn with one individual detected in the Blackwater Estuary (Davies et al. 2020). However, given the spatial and temporal nature of the proposed works, the proposed project is considered too distant from Natura 2000 sites where

it is a feature of interest for any significant interaction to occur. Similarly, SACs designated for lamprey species were considered too distant for any significant interaction to occur.

Potential Effects

5.6 The marine installation of a fibre-optic cable is a complex and challenging procedure. From the beginning of the planning stage to determining the final cable route, careful thought has gone into ensuring the longevity of the cable and uninterrupted service. This, in tandem with marine usage licencing and environmental legislation results in the routing of the cable in as stable an environment as possible that will have minimal impact on the environment and threat of anthropogenic disturbance.

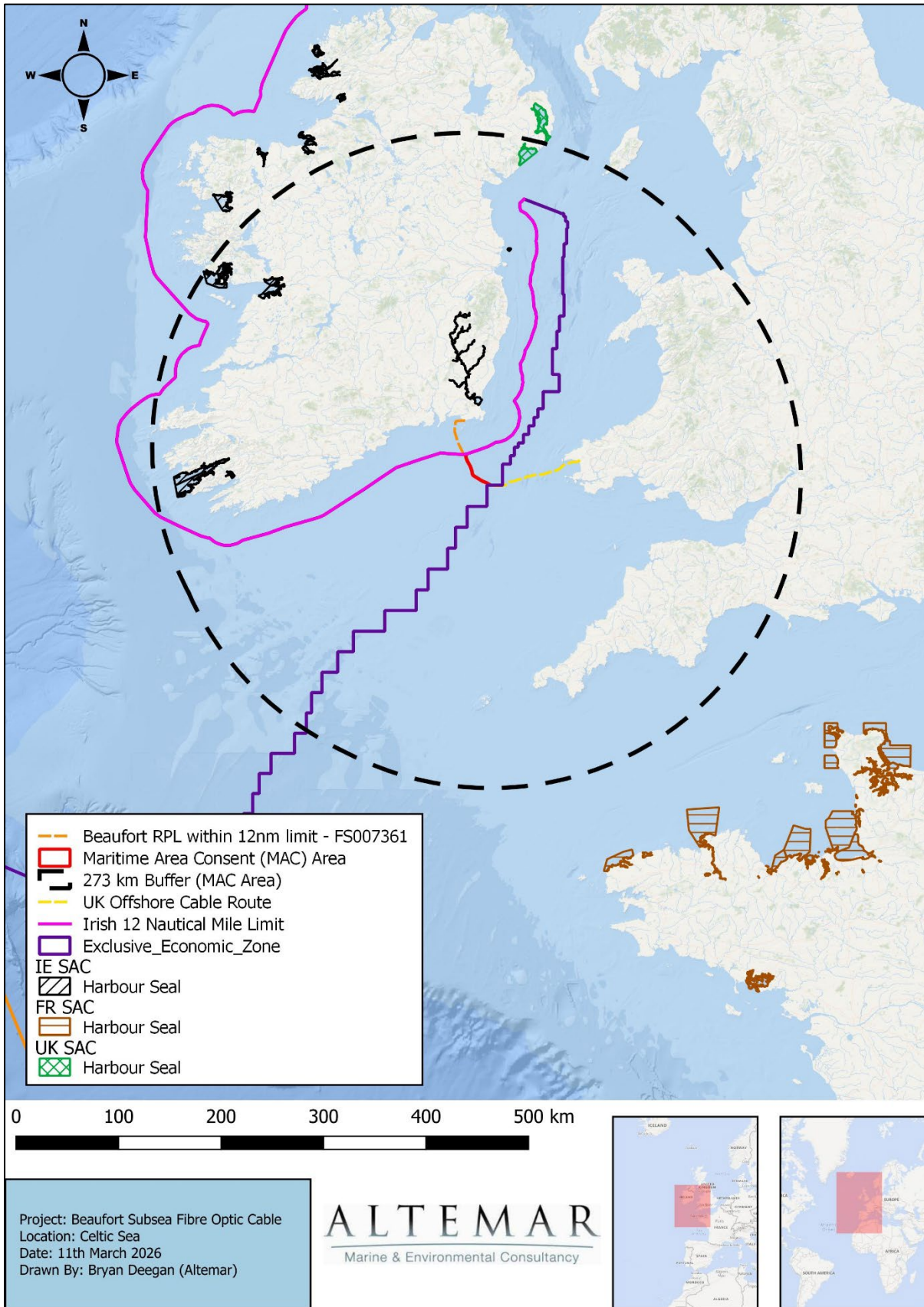


Figure 15: IE, FR, & UK SACs Designated for Harbour Porpoise (*Phocoena phocoena*) within the Celtic and Irish Seas MU for Harbour Porpoise

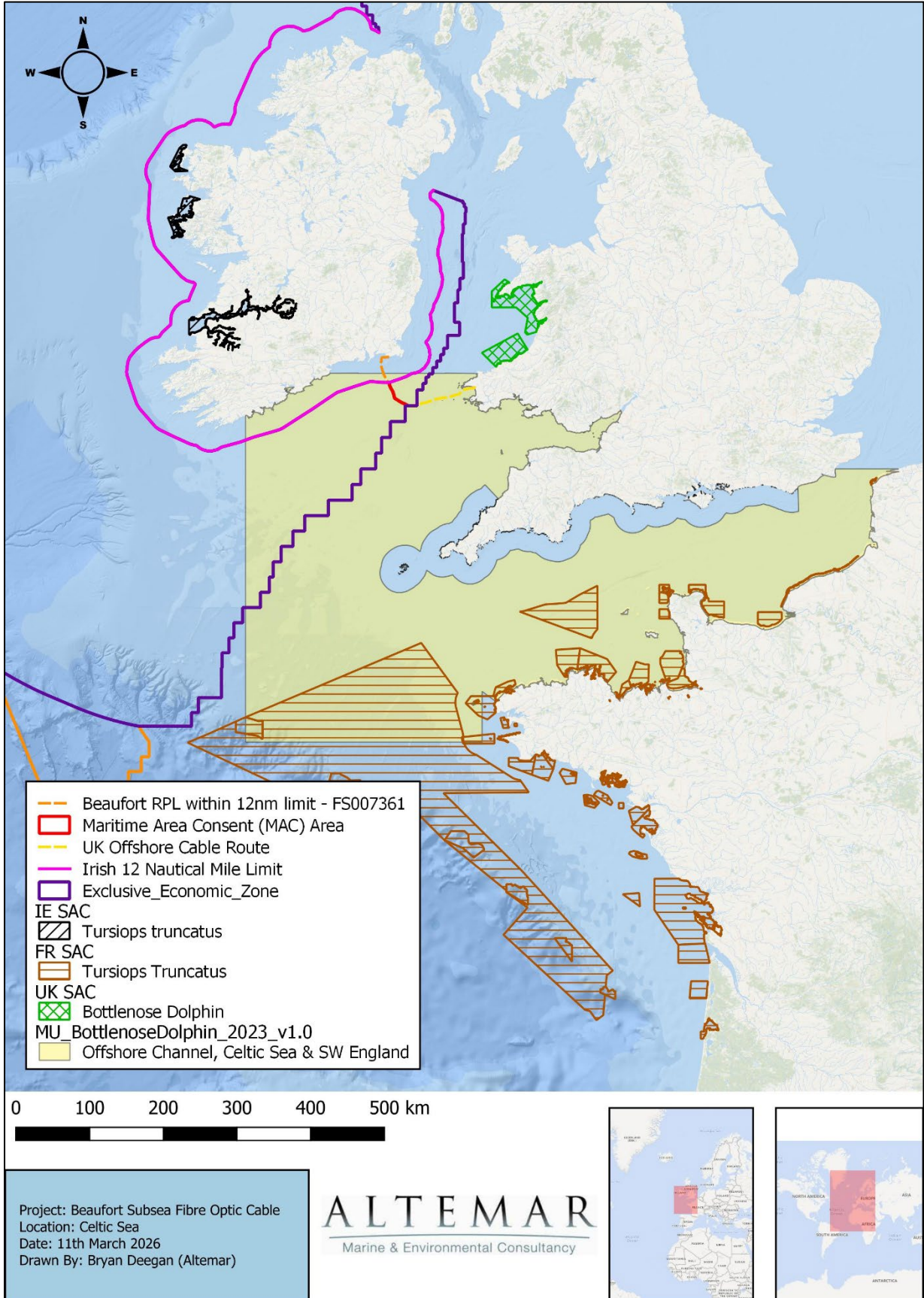


Figure 16: IE, FR, & UK SACs designated for Bottlenose Dolphin (*Tursiops Truncatus*) within the Celtic Sea, Irish Sea & SW England MU for Bottlenose Dolphin

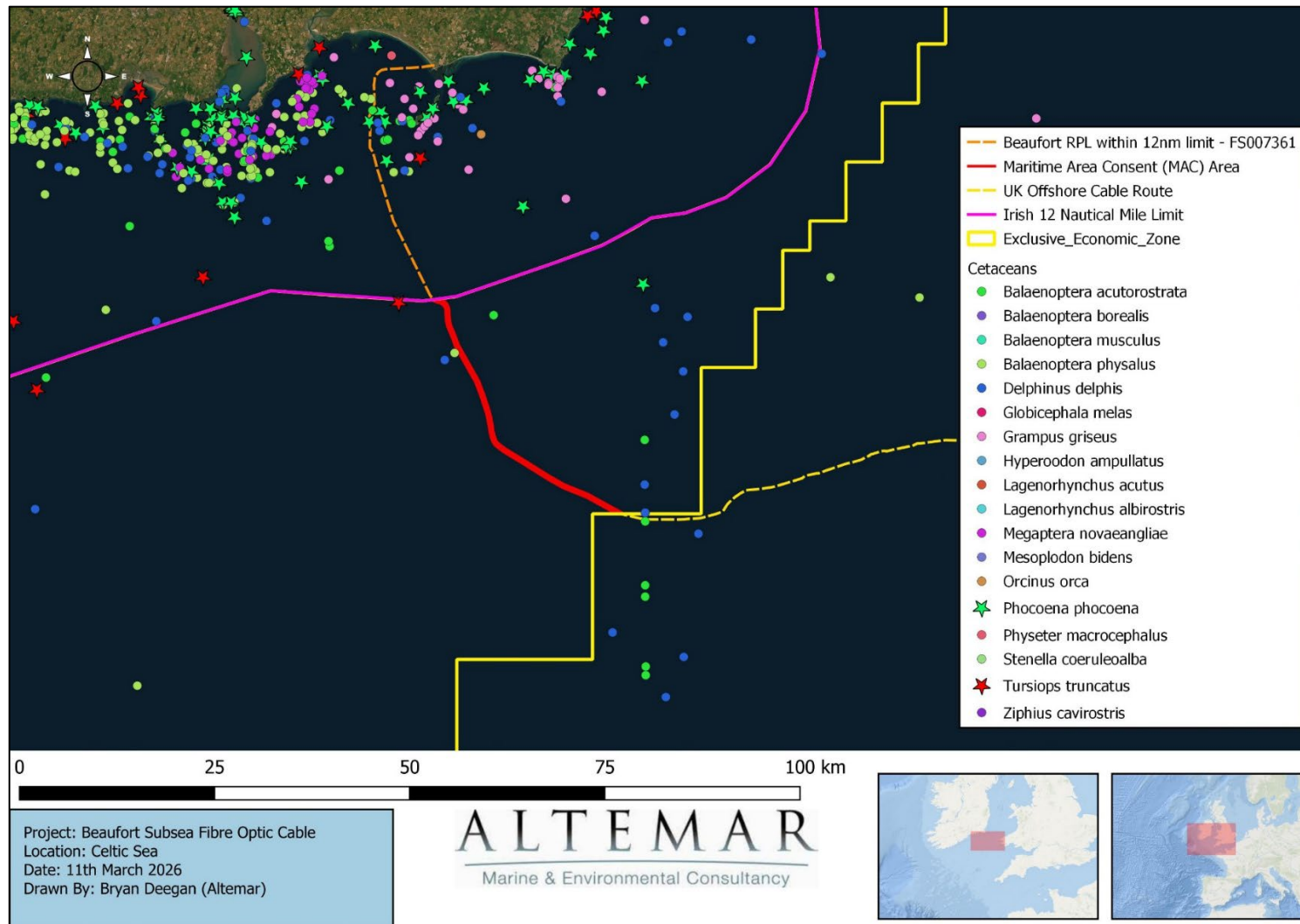


Figure 17: Recorded Cetacean Species Sightings (Source NBDC Sightings Data) proximate Beaufort Offshore Cable Route

6.0 ARCHAEOLOGY & CULTURAL HERITAGE

6.1 An Underwater Archaeological Impact Assessment (UAIA) was undertaken for the offshore section of the Beaufort Cable System between the Irish 12nm limit and the Exclusive Economic Zone (EEZ), assessing potential impacts on marine cultural heritage.

6.2 The study area is located within St George's Channel and comprises a c. 38 km section of the cable route within a 400m-wide corridor, characterised primarily by sandy seabed content with some gravel content.

6.3 Desktop assessments and archaeological reviews have identified a high potential for submerged prehistoric landscapes, as the area would have been dryland during the late Pleistocene and early Holocene periods.

6.4 The archaeological and cultural background indicates long-term maritime activity in the region from prehistory through the medieval and post-medieval periods, including trade, fishing, and navigation routes between Ireland and Britain.

6.5 Wreck inventory data indicates:

- One recorded wreck (W18565) within the study corridor.
- No additional known wrecks within 1km of the route.
- However, 325 unlocated wrecks are recorded in the wider area, indicating significant potential for unknown remains.

6.6 Geophysical survey data collected during the survey phase of the Beaufort project identified:

- Two potential wreck anomalies, one within the study area and one outside the EEZ.
- One previously recorded wreck (W10924) was not detected, likely due to burial or positional inaccuracy.

6.7 Geotechnical investigations (cores, grab samples CPTs) carried out during the survey phase of the Beaufort project identified no material of archaeological significance, with sediments consisting mainly of sands and shelly sands.

6.7 The assessment concludes there is:

- Low risk to known archaeological assets, as works avoid identified sites.
- Residual risk to unknown or buried archaeology, including wreck material and submerged landscape deposits.

6.8 Proposed works such as Pre-Lay Grapple Run (PLGR), trenching, and cable burial may disturb previously unidentified archaeological material, although extensive survey coverage reduces this risk.

6.9 Mitigation measures include:

- An archaeological review has been undertaken of the final cable route and installation methodology with no issues foreseen. .
- A proposed exclusion zone of 100m will be in place around all known or identified archaeological features. No known wrecks are within 100m of the final Beaufort Cable route, therefore it will not enter any known archaeological exclusion zones.
- Licenced archaeological monitoring of all seabed-disturbing activities.
- Inspection and assessment of any recovered material during operations.

6.10 Additional mitigation includes:

- Procedures for discovery of previously unknown archaeology.
- Retention and assessment of organic or paleoenvironmental material
- Post-installation archaeological reporting to relevant authorities.

6.11 Overall, with implementation of mitigation measures, no significant impacts on known archaeology are anticipated, although a precautionary approach is required due to the potential of undiscovered archaeology.

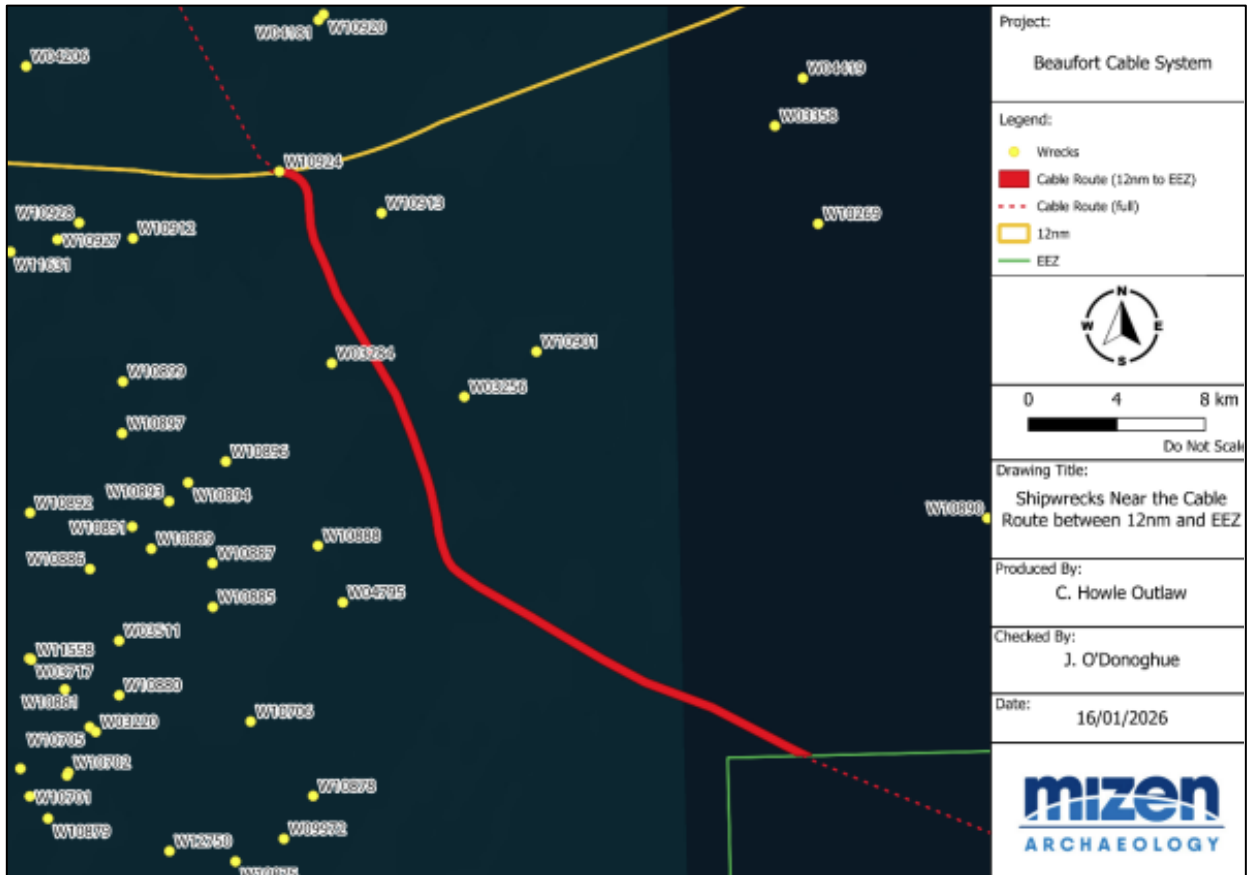


Figure 18: Known Shipwrecks in Vicinity of the Beaufort Cable System

7.0 PEOPLE & HUMAN HEALTH

7.1 The proposed offshore installation of the subsea telecommunications cable is located at a substantial distance from the coastline and from any permanent human receptors (29 km). The works will be confined to the offshore marine environment and will not give rise to emissions, discharges, or activities that could result in direct or indirect exposure of the public. In the absence of an identified exposure pathway, no effects on human health are anticipated as a result of the proposed works.

7.2 The proposed subsea telecommunications cable constitutes a passive, unenergized fibre-optic system and does not transmit electrical power. As such, the cable will not generate electromagnetic fields during operation. No EMF-related effects on human health are therefore anticipated.

7.3 The cable installation will be conducted in accordance with all relevant national and international Health and Safety Legislation and Regulations, such as the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) and Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007), as amended and in adherence to all major international shipping conventions, adopted by the International Maritime Organization (and the International Labour Organization) concerning maritime safety and pollution prevention. With the implementation of these measures, there will be no impact nor any significant effects on people and human health during the installation.

8.0 LAND & SOILS

8.1 The Celtic Sea seabed off the coast of south-east Ireland, is underlain by Paleozoic and Mesozoic bedrock that is covered by younger sediments. These bedrock units include ancient sandstones, siltstones and other sedimentary rocks from the Devonian and Carboniferous periods, with underlying formations such as limestone and sandstone deposited hundreds of millions of years ago. Offshore, this solid bedrock is buried beneath a thick layer of Tertiary and Quaternary sediments (sands, clays, gravels) that were deposited during and after ice ages, creating a mostly flat seabed surface

8.2 As shown in Figure 19, the entire offshore section of the Beaufort route between the Irish 12 nautical mile limit and the Irish EEZ traverses sandy seabed.

8.3 The seabed is regularly disturbed by natural processes. The cumulative volume of sediment displaced during the cable installation is small. Any sediment disturbed or suspended by the sampling will settle almost immediately. The cable installation is of short duration, with reinstatement of any areas of seabed impacted by cable installation completed naturally by tidal movements and currents. There will be no significant impact nor any significant effects on land and soils within the cable installation corridor.

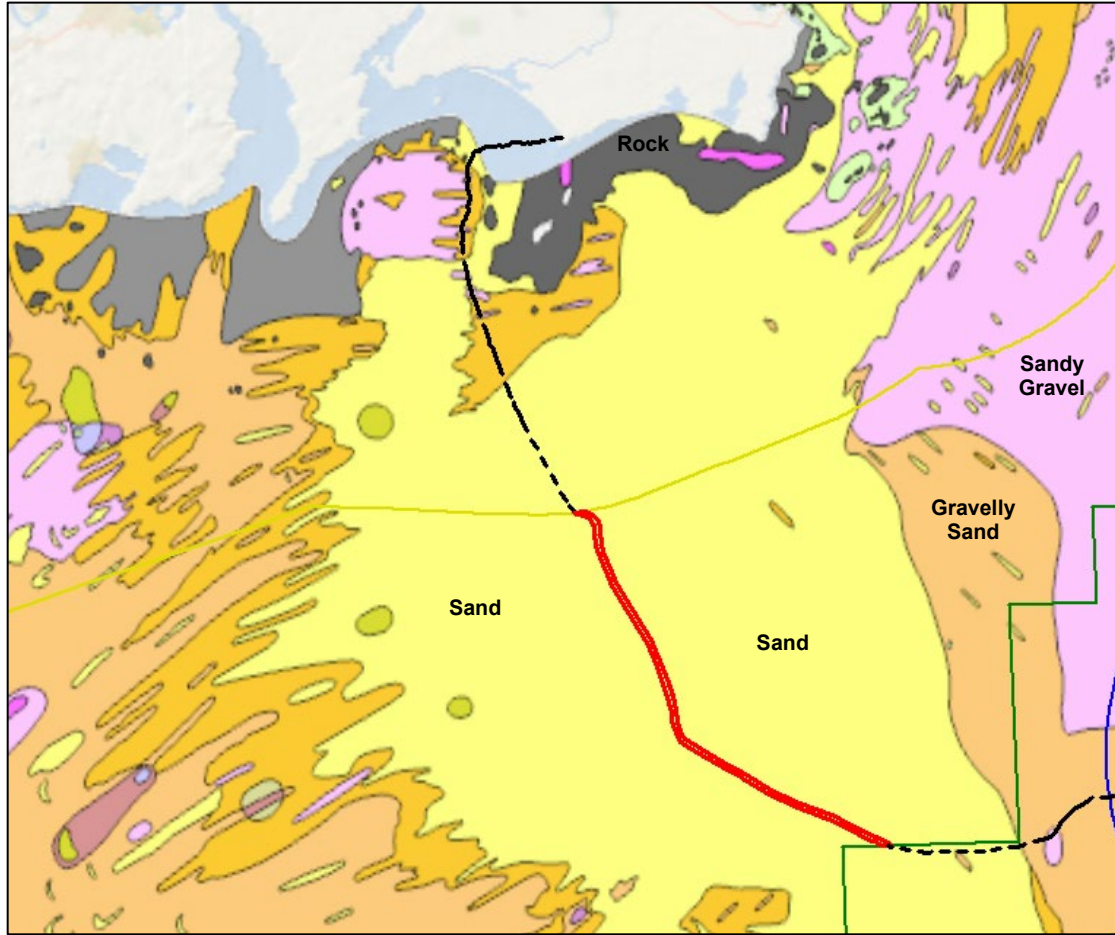


Figure 19: Indicative Seabed Sediments within the Beaufort Installation Corridor

9.0 LANDSCAPE & SEASCAPE

9.1 The proposed subsea telecommunications cable will be installed on or beneath the seabed and will not result in the introduction of any permanent above-surface structures. As such, the operational presence of the cable will not give rise to effects on the offshore seascape or coastal landscape character. During installation, the cable lay vessel will be present within the Celtic Sea for a short duration; however, this presence will be temporary, localised, and transient in nature. Given the offshore location and limited installation period, no significant effects on landscape or seascape receptors are anticipated.

10.0 AIR QUALITY

10.1 During the cable installation, there will be no releases of emissions to air, other than routine vessel exhausts. Air Quality standards will not be exceeded.

11.0 NOISE & VIBRATION

11.1 Shipping and general vessel traffic is a major contributor to background noise in oceans and seas. Vessels generally produce low frequency continuous sound. The cable installation vessel will contribute to background ocean noise. As seen in Figure 20, Figure 21 and Figure 22, there is existing vessel traffic (shipping, fishing, recreation) transiting the cable installation corridor which generates anthropogenic sound and therefore the operation of the cable lay vessel in the area will not create significant additional noise or disturbance. Marine mammals are often seen near human activity and exhibit some tolerance to anthropogenic noise and other stimuli and range over a wide area when foraging.

11.2 Noise generated during installation of the subsea telecommunications cable will be associated primarily with the operation of the installation vessel and ancillary equipment. These activities are expected to generate relatively low noise levels compared to other offshore activities and will be short-term and localised in nature. Given the offshore location of the works and the absence of nearby human receptors, no significant noise effects are anticipated.

11.3 The risk of disrupting the life cycle of marine mammals is extremely low. The cable installation operations could cause temporary displacement from the immediate area and if it occurs, it will only occur during short periods. Any effect is likely to be localized and of relatively short duration. The potential for impact was considered within the Applicant's NIS assessment and Risk Assessment for Annex IV Species.

11.4 The cable installation operations shall comply with the NPWS (2014) "Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters". These guidelines would be deemed adequate to mitigate the negative impacts of the works. Cetaceans in the vicinity of the vessel during start up procedures would be given ample time to leave the site with the soft start procedures outlined in the guidelines. In addition, vessel speeds are extremely slow which would give marine

mammals ample opportunity to move from the area. With the implementation of mitigation measures, there is no significant risk for potential impact on cetacean and any possible disturbance from the works would be contained within the very limited local disturbance from the presence of the cable installation vessel.

12.0 NAVIGATION & SHIPPING

12.1 Figure 20 and Figure 21 represent the density of cargo vessel and tanker movements in the vicinity of the cable installation corridor respectively. This AIS data relating to vessel movement was sourced from Natural Resources Wales.

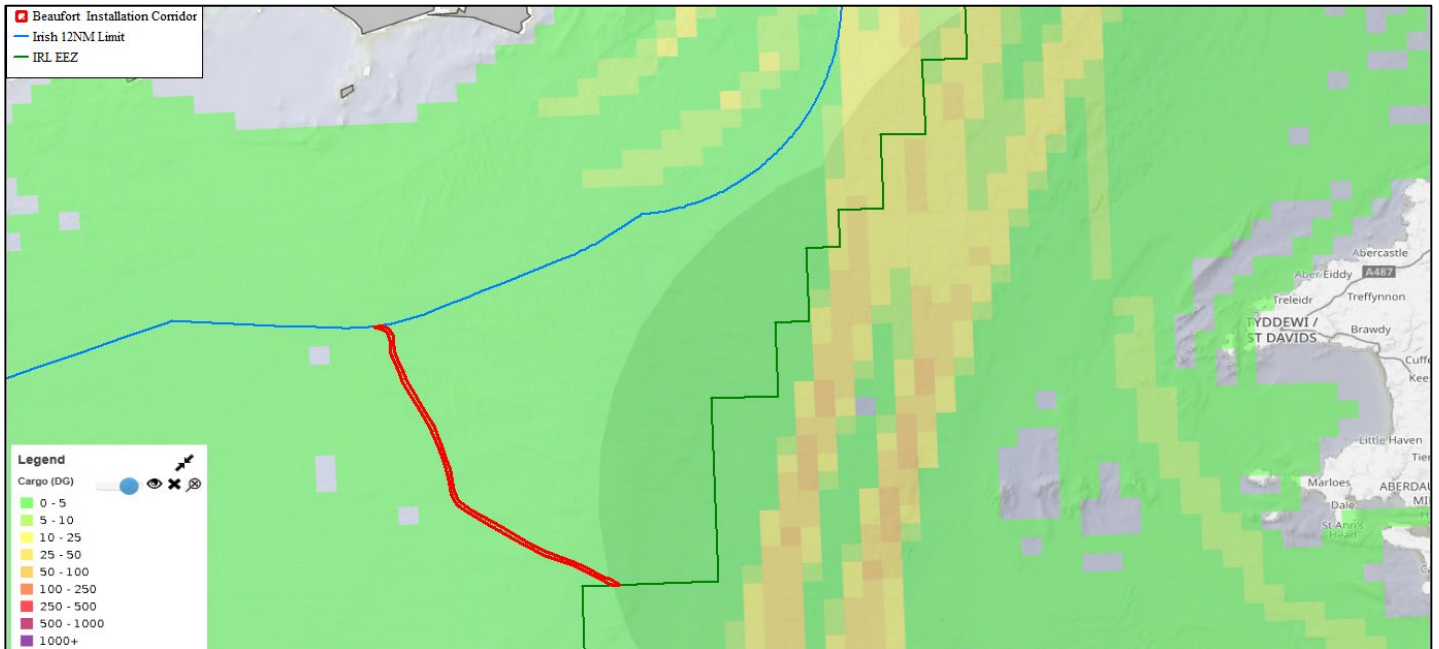


Figure 20: Density of Cargo Vessel Movements in Vicinity of Beaufort Installation Corridor

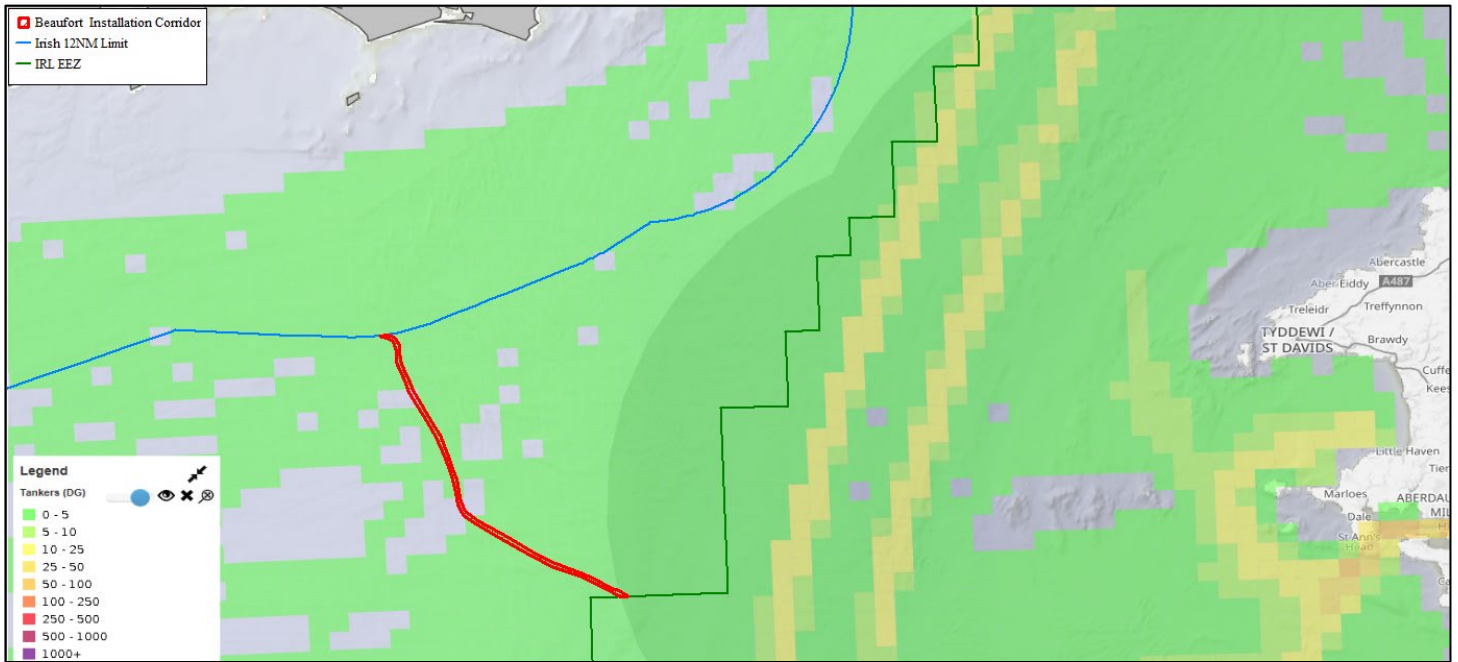


Figure 21: Density of Tanker Movements in Vicinity of Beaufort Installation Corridor

12.2 There are two prominent shipping lanes used by large vessels which can be seen clearly in Figure 20 and Figure 21. They both run in a north-south direction linking Dublin and Liverpool with continental Europe. Within Irish territorial waters, the cable installation operations will be temporary and a sufficient distance from the shipping lanes to not cause any significant disruption (approximately 12.5km).

12.3 Figure 22 shows the density of passenger vessel movements in the vicinity of the cable installation corridor. The closest major ferry route is Rosslare, Co. Wexford to Fishguard, Wales, it is approximately 44km from the installation corridor. Overall, there is a very low density of passenger vessel traffic within the installation corridor, and no impacts are expected to passenger vessel services due to the installation works.

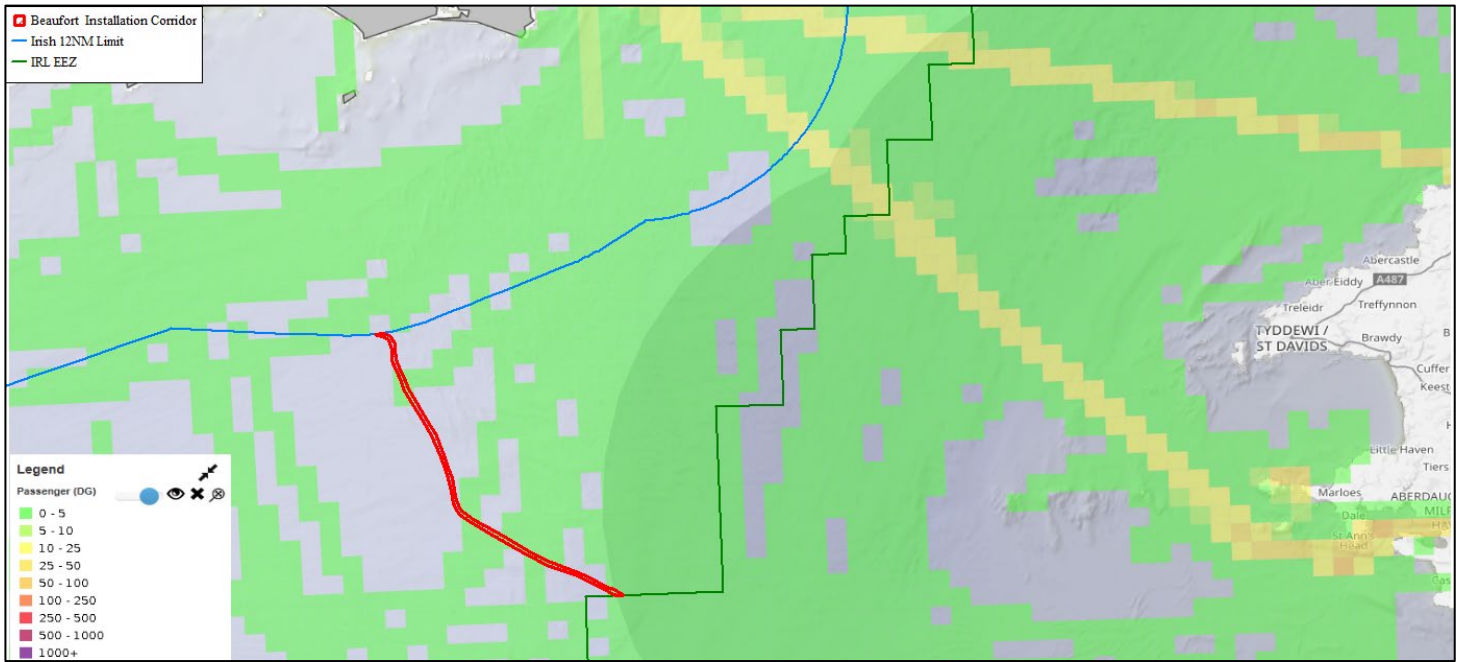


Figure 22: Density of Passenger Vessel Movements in Vicinity of Beaufort Installation Corridor

12.4 During the cable installation operations, the cable lay vessel will display lights, shapes and internationally recognised identification or warning signals. Other vessels will be requested to maintain a safe distance from the cable lay vessel due to their restricted manoeuvrability. Mitigation measures will be in place to ensure compliance with the International Regulations for Preventing Collisions at Sea and standards, including the issuing of a formal marine notice

13.0 FISHERIES

13.1 The offshore installation corridor intersects the wider distribution of several commercially important fish spawning and nursery grounds, including:

- Cod
- Horse Mackerel
- Haddock
- Hake
- Megrim
- Mackerel
- Whiting
- Atlantic Salmon

These spawning and nursery areas extend over broad regions of the Celtic Sea and, as such, the section of seabed intersected by the proposed works is not considered to be of specific or critical importance to any single species. A detailed overview of the potential impacts of the Beaufort cable installation on these spawning/nursing grounds is detailed in the supporting EclA report. No long-term or permanent effects on fish populations or recruitment are anticipated.

13.2 The proposed Application Area does not pass through any areas designated for activity by the inshore fishing fleet, or under any aquaculture licenses. The proposed Application Area does pass through areas of beam trawl activity by offshore fishing fleets (Figure 23). The Application Area also passes through areas of insignificant levels of gill net, pelagic trawl and offshore seine fishing activity, and less than 10 km from areas of significant dredge fishing activity (Figures 24-27). There is therefore the potential for overlap with vessels actively engaged in fishing activity, as well as vessels in transit to/from fishing grounds. Due to the scale and nature of the proposed works within the proposed MAC application area in relation to the areas of fishing activity, no significant impact on the target species for these fisheries is foreseen. However,

there is the potential for minor disruption by pre/main/post-lay activities on offshore fishing activity, and of fishing activity disrupting cable laying activity. Furthermore, considering many of the fishing activities being undertaken in the surrounding areas involve contact with the seabed, this should be taken into consideration for proposed activities along the proposed cable route.

13.3 Consultation with fisheries representatives, engagement with EU fleets and issuance of Marine Notices should be carried out prior to the proposed works to avoid disruption to fisheries and prevent a direct overlap with fishing activity that may cause interruptions to proposed pre/main/post-lay activities. The fisheries management and mitigation strategy (FMMS) for the project is outlined in the supporting construction environmental management plan (CEMP) document and will be adhered to for the duration of the cable installation.

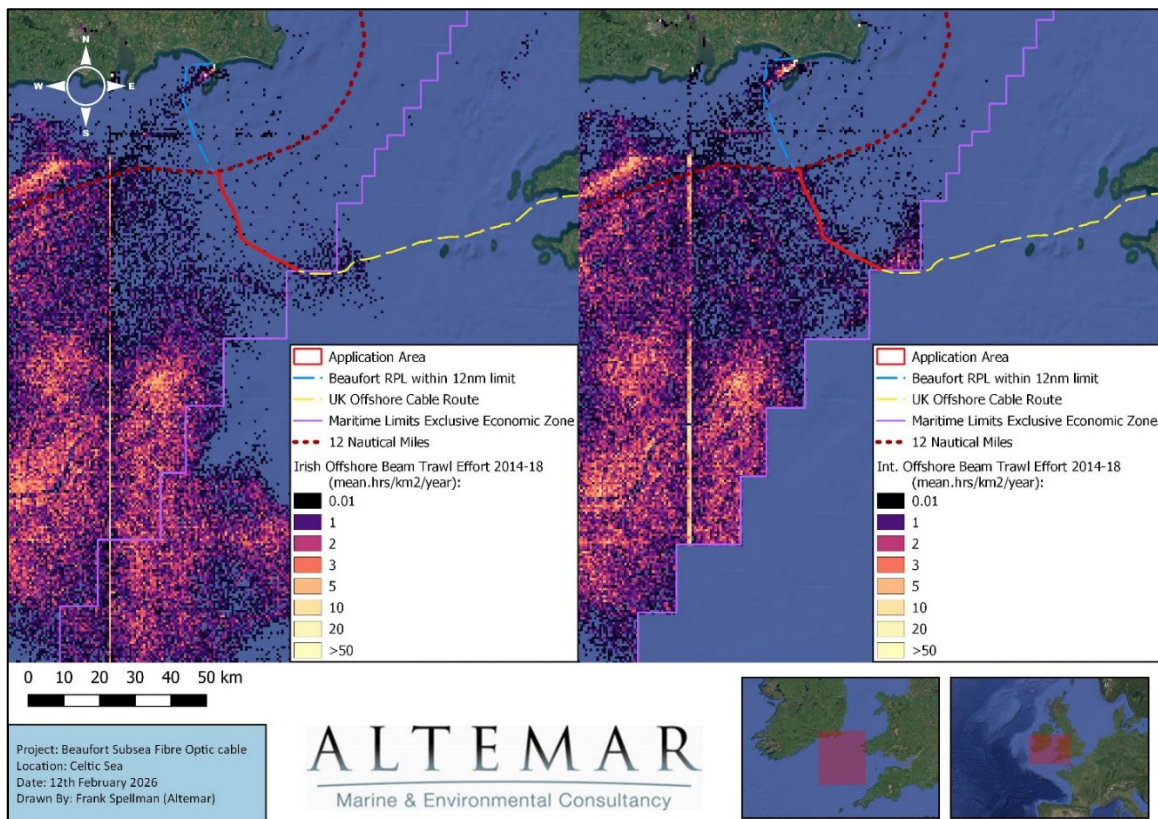


Figure 23: Irish Offshore Beam Trawl Activity in Relation to Beaufort Application Area

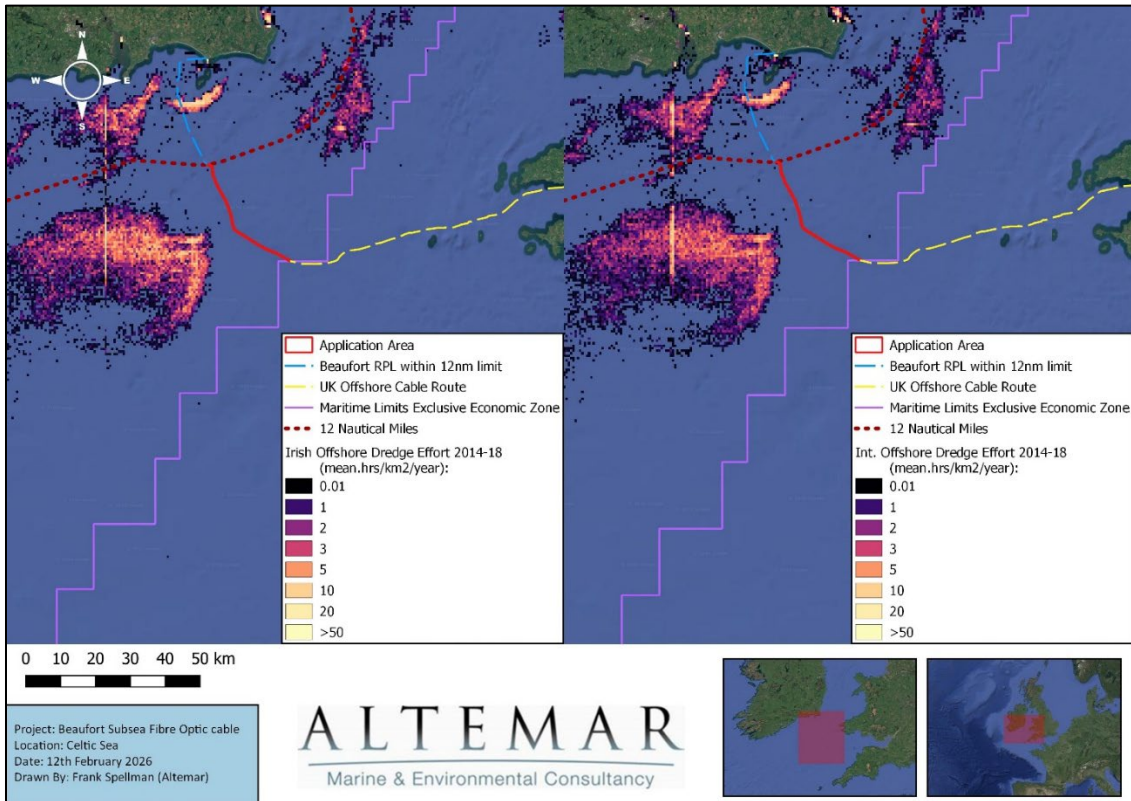


Figure 24: Irish Offshore Dredge Trawl Activity in Relation to Beaufort Application Area

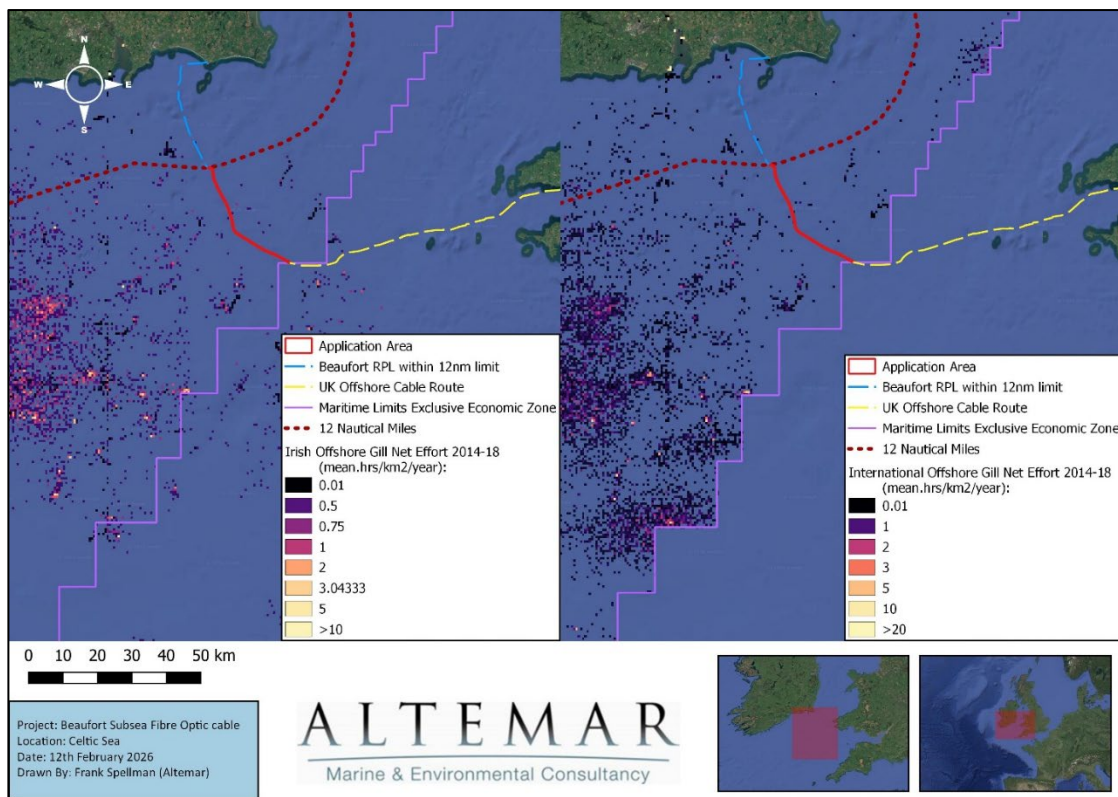


Figure 25: Irish Offshore Gill Net Effort in Relation to Beaufort Application Area

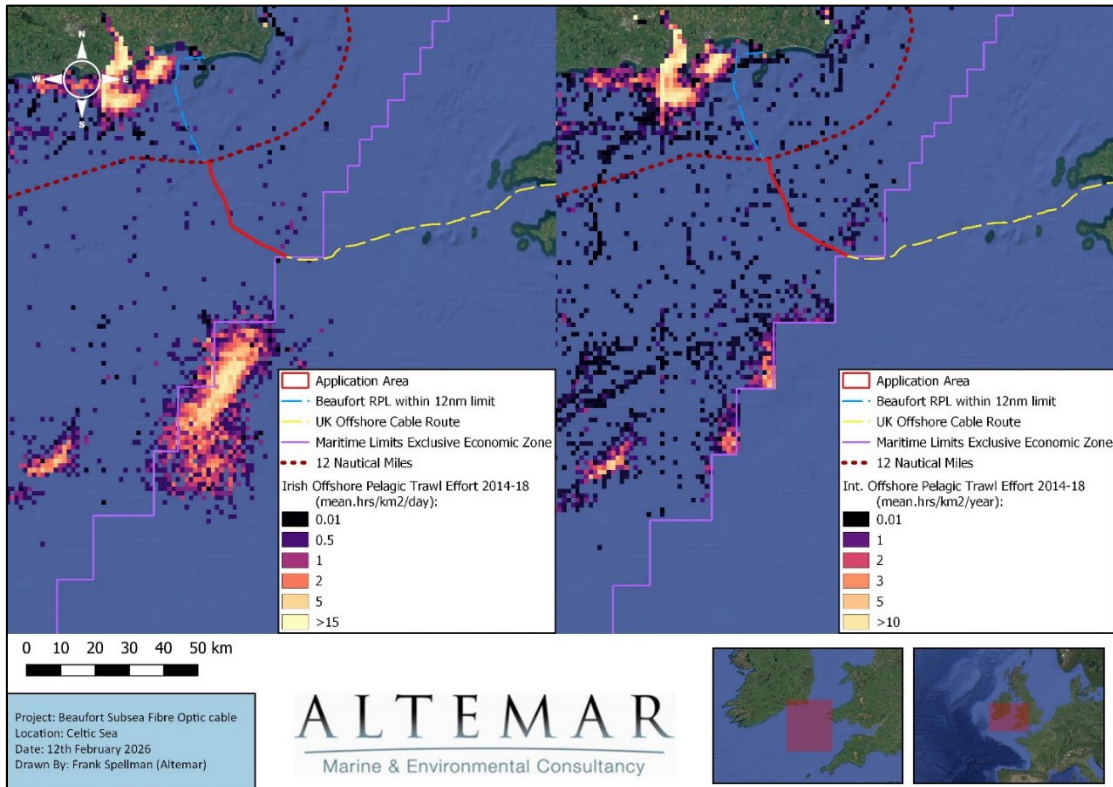


Figure 26: Irish Offshore Pelagic Trawl Effort in Relation to Beaufort Application Area

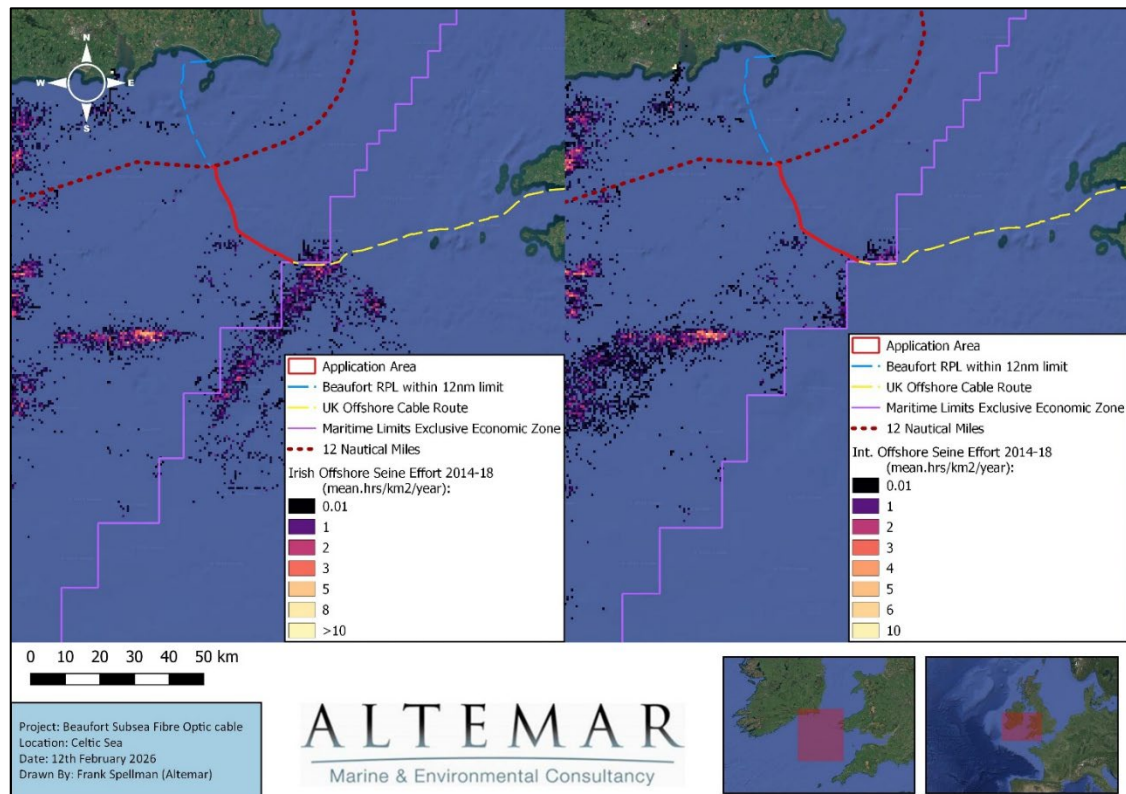


Figure 27: Irish Offshore Seine Effort in Relation to Beaufort Application Area

Aquaculture

13.4 There are no licensed aquaculture sites within or adjacent to the proposed offshore installation corridor. The nearest aquaculture facility is an oyster and clam farm operated by Bannow Island Shellfish Ltd.; it is approximately 40km from the installation corridor. The nearest aquaculture on the UK side is a seaweed farm operated by Car-y-Mor; it is approximately 67km from the installation corridor. No interaction pathways have been identified. As such, the installation activities are not expected to result in any effects on aquaculture operations.

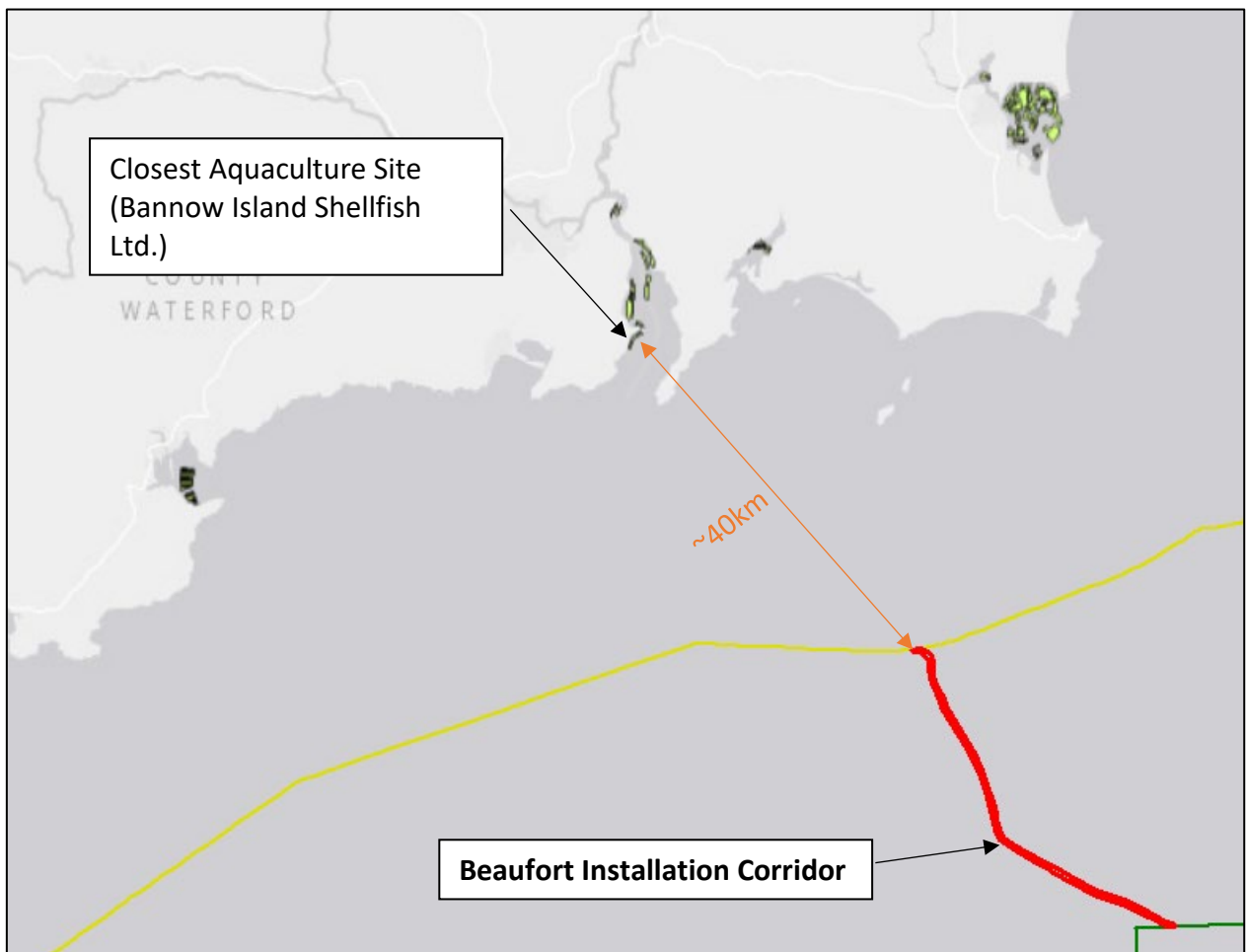


Figure 28: Irish Aquaculture Sites in Relation to the Beaufort Installation Corridor

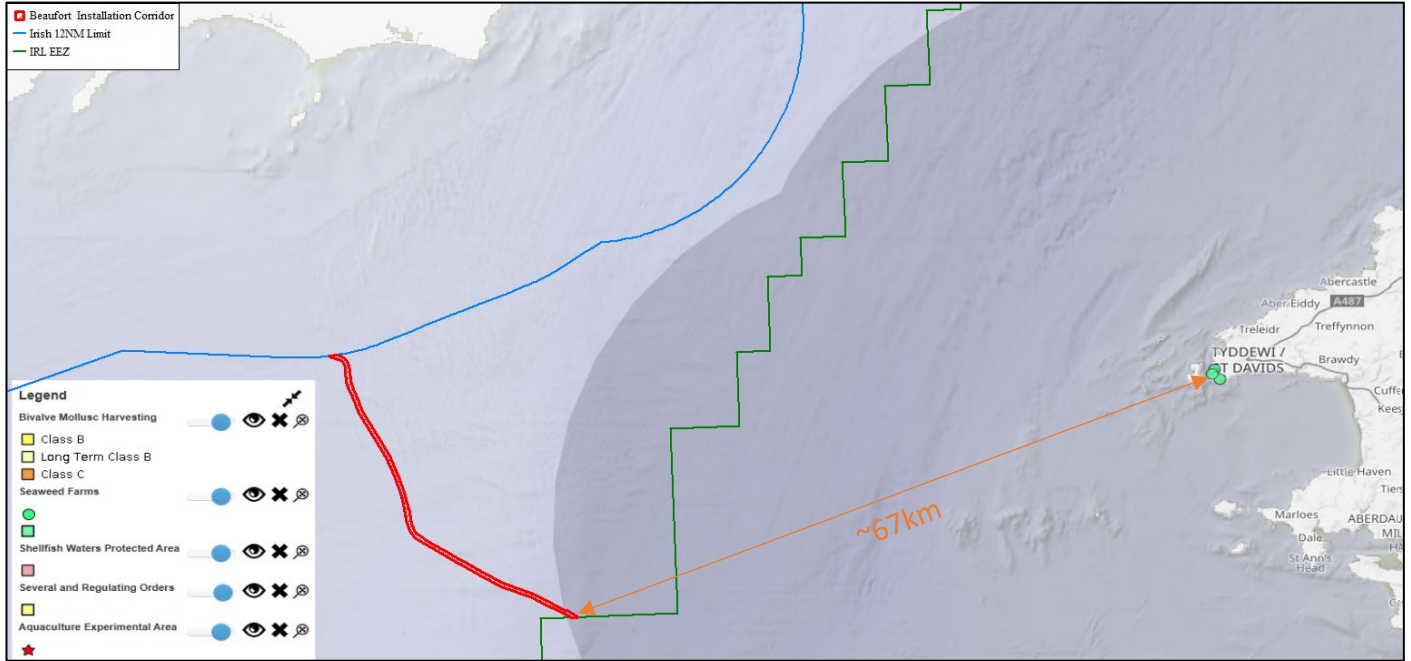


Figure 29: Welsh Aquaculture Sites in Relation to the Beaufort Installation Corridor

14.0 RECREATION

14.1 The proposed subsea telecommunications cable installation corridor is located offshore, with the closest point situated approximately 29 km from the mainland of County Wexford. Recreational activities such as coastal walking, sailing, angling, surfing, and other nearshore water-based uses are therefore spatially removed from the proposed works. Installation activities will be short-term and localised, and no permanent surface infrastructure will be introduced. Given the offshore location, distance from recreational receptors, and temporary nature of the works, no significant effects on recreational activities are anticipated.

14.2 Recreational boating and sailing activity is primarily concentrated in nearshore and coastal waters (as shown in Figure 30), the installation corridor lies outside areas typically used by recreational craft. Installation activities will be temporary and managed in accordance with standard maritime safety procedures, including appropriate notifications to mariners.

14.3 During the marine installation operations, the cable installation vessel will display lights, shapes and internationally recognised identification or warning signals. Other vessels and marine users will be requested to maintain a safe distance from the cable lay vessel due to their restricted manoeuvrability.

14.4 Mitigation measures will be in place to ensure compliance with the International Regulations for Preventing Collisions at Sea and standards, including the issuing of a formal marine notice. As the cable installation will be temporary and of limited duration, the effect on recreation activities is expected to be minor.

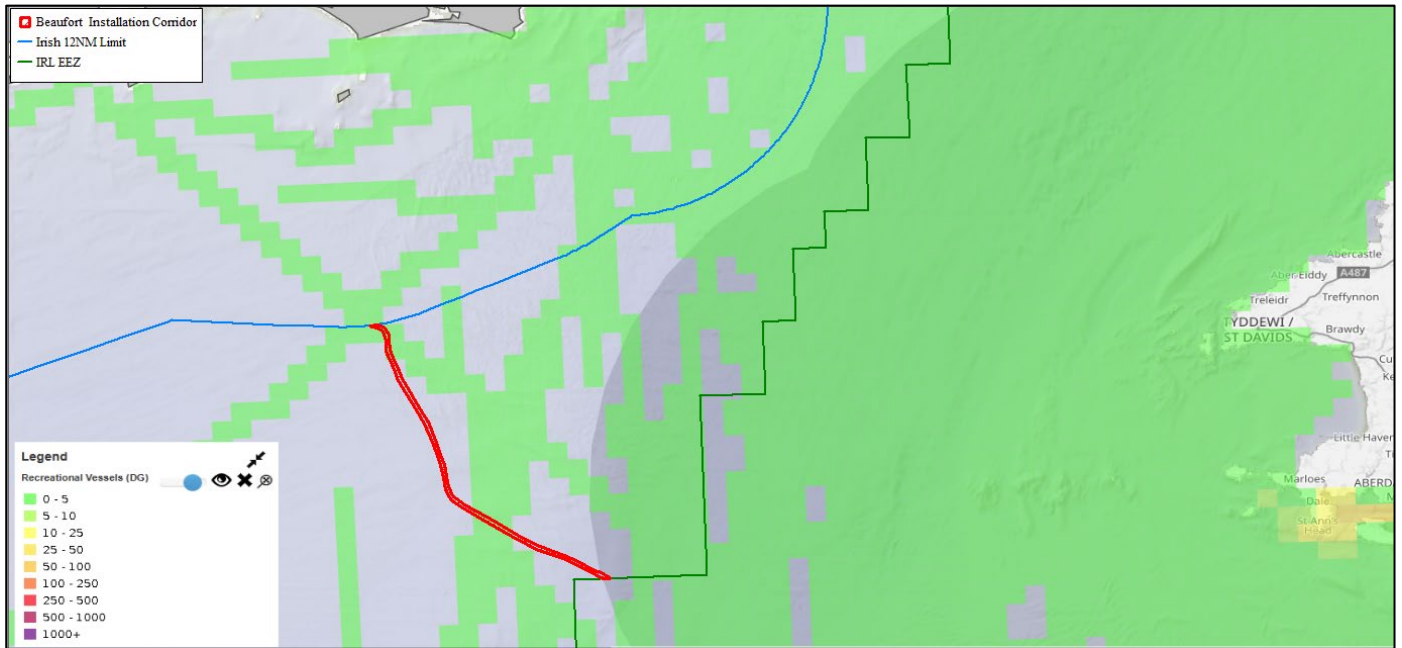


Figure 30: Pleasure Craft Vessel Activity in the Vicinity of the Beaufort Installation Corridor

15.0 CLIMATE

15.1 The operation of the cable installation vessel will result in the emission of exhaust gases associated with fossil fuel use. The transport of people, equipment and materials will also result in emissions of exhaust gases. Given the nature of the installation operations which will be conducted over a short timeframe, the quantity of emissions will be small and effects contributing to climate change will not arise. There will be no significant impact due to the planned cable installation works.

16.0 WASTE

16.1 A very small amount of non-hazardous refuse will be produced on board the cable lay vessel resulting from the normal day-to-day operations such as kitchen waste, consumables etc. No waste material will be dumped into the sea. All refuse waste shall be stored on board the vessel and safely disposed of onshore in accordance with the MARPOL Convention.

17.0 MATERIAL ASSETS

17.1 As described in Section 3 of this report, there are several existing subsea assets that cross the Beaufort cable route between the Irish 12nm limit and the EEZ boundary including (shown in Figure 31):

- UK-IRL Crossing 1 (In-service telecoms cable)
- Hibernia Atlantic (In-service telecoms cable)
- Greenlink Interconnector (In-service electrical interconnector)
- Several out of service telecoms cables

The methodology for the installation at in the vicinity of these third-party asset crossings is described in detail in Section 3. There are no issues foreseen regarding the impact of the installation of Beaufort and other subsea assets.

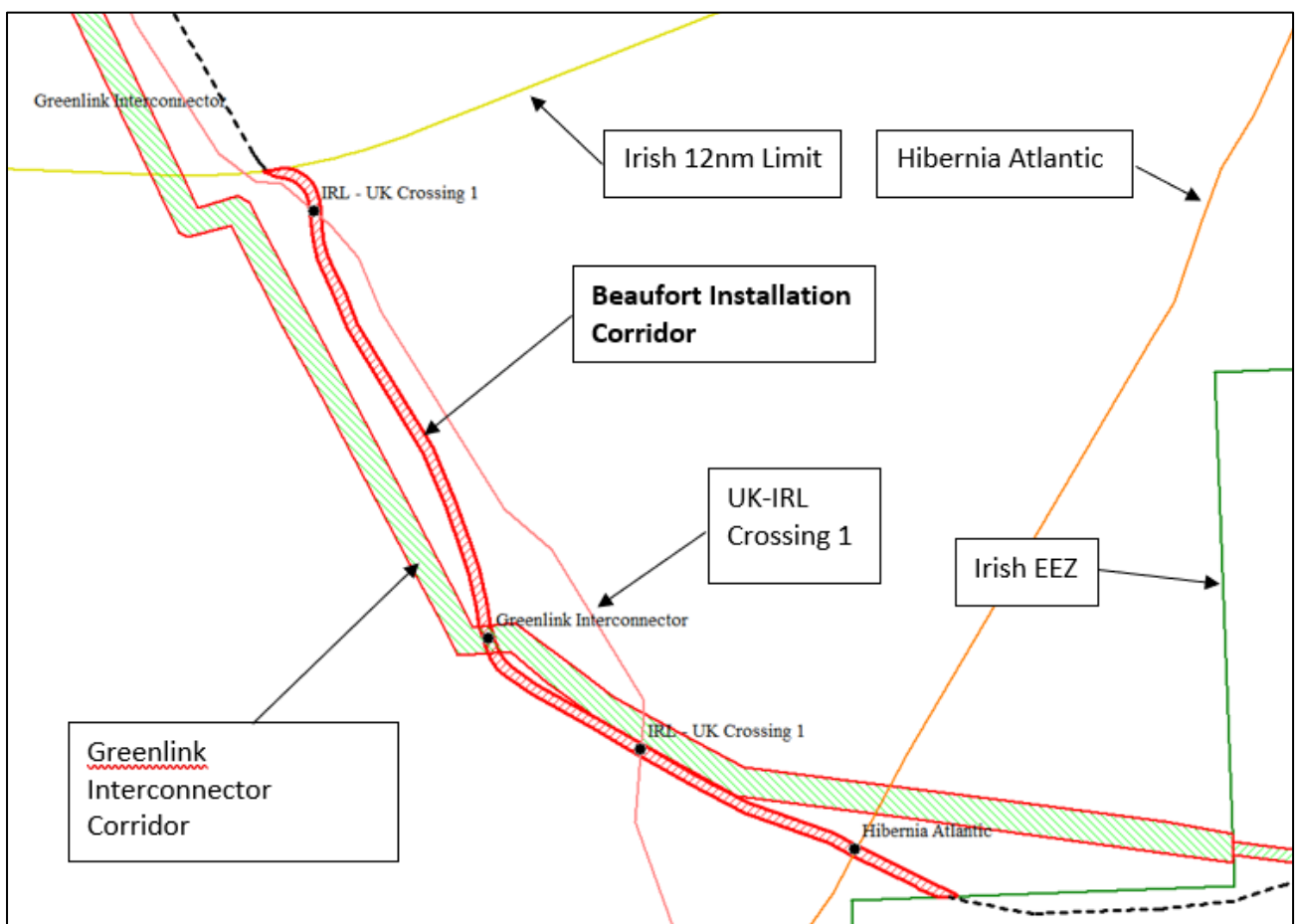


Figure 31: Subsea Crossings near Beaufort Installation Corridor

17.2 The installation corridor does not cross and will not interact with any of the following:

- Existing offshore renewable energy sites, i.e. wind farms
- Pipelines
- Oil and gas production facilities or licence blocks
- Restricted maritime areas
- Designated anchorage areas
- Marine outfalls

18.0 ACCIDENTS & DISASTERS

18.1 Given the nature of the installation operations which will be small scale, temporary and conducted over a short timeframe, they will not influence natural disasters, such as earthquakes, subsidence, landslides, erosion, or flooding. Coastal fog or adverse stormy weather and related sea states can occur in the installation corridor and wider coastal/offshore marine zones.

18.2 The potential for a major accident to arise because of the installation operations is low and will be further minimised through mitigation measures. With relevance to safety of shipping and navigation, mitigation will include publication of a formal Marine Notice, display of lights, shapes and other internationally recognised identification or warning signals on the cable lay vessel and compliance with all requirements of the International Regulations for Preventing Collisions at Sea.

19.0 INTERACTIONS

19.1 Marine Area Consents (MACs), Marine Usage Licences (MULs), Foreshore Applications, the Irish EIA portal and the Wales Marine Planning Portal were examined, and the potential for in-combination effects or interactions due to development in the area assessed.

19.2 In terms of investigating potential interactions between the installation of Beaufort and maritime activities on the Irish side of the EEZ boundary, a review of the Maritime Regulatory Authority's (MARA) online portal for MAC and MUL applications and determinations was undertaken for developments in County Wexford and County Waterford. For applications prior to July 2023, the foundation date of MARA, the DHLGH Foreshore Licence Applications and Determinations search tool (Department of Housing, Local Government and Heritage (DHLGH)), was used to search for foreshore licence applications for developments in County Wexford and County Waterford. The NMPF Activities Map was also consulted for relevant licence applications. This is considered a conservative approach, considering the very temporary and localised nature of the cable installation operations detailed in this application.

19.3 In terms of investigating potential interactions between the installation of Beaufort and maritime activities on the Welsh side of the EEZ boundary, a review of the Wales Marine Planning Portal and Natural Resources Wales public register of permits was undertaken.

Reference	Title	Year	Location	Activity	Status	Potential for Interaction
FS007361	Beaufort Subsea Fibreoptic Cable	2022	Off Wexford Coast	Installation of subsea fibreoptic cable between Kilmore Quay, Co. Wexford and Irish 12nm Limit	Determined	<p>There is a potential for in-combination effects in terms via noise and visual disturbance to marine mammals and protected seabirds.</p> <p>The implementation of the mitigation measures outlined in <i>Section 21</i> will be required to prevent in-combination effects.</p>
MAC240016	Laying of a Fibre Optic Cable and auxiliary works	2025	Duncannon, Co. Wexford and Crooke, Co. Waterford	Telecoms Cable Installation	Applied	No installation corridor overlap and very low probability for any interaction.
MAC240057	Offshore Windfarm Development – Helvick Head Offshore Wind	2025	Tonn Nua, off County Waterford	The development of a 900 megawatt (MW) offshore windfarm	Applied	No installation corridor overlap and very low probability for any interaction.
MAC20240006	Beach Restoration	2025	Courtown, Co. Wexford	The restoration of the north beach and construction of beach retaining coastal defence structures and the installation of a new marina and necessary supporting structures	Applied	No installation corridor overlap and very low probability for any interaction.
MAC20230005	ORE Operation and Maintenance Facility Development	2024	Rosslare Europort, Co. Wexford	ORE Operation and Maintenance facility, which includes reclamation of approximately 20 hectares for assembly/storage, relocation of small boat harbour, capital dredging, quay walls, road access and rock armour boundary.	Determined	No installation corridor overlap and very low probability for any interaction.

MUL250019	Site Investigation – Helvick Head Offshore Wind	2025	Tonn Nua, off County Waterford	The proposed site investigation (SI) works are activities required to characterise the physical, biological, and environmental conditions of Maritime Area A - Tonn Nua. The data collected will underpin project design, environmental assessment, and consenting, for any future offshore wind development within Maritime Area A – Tonn Nua	Applied	No installation corridor overlap and very low probability for any interaction.
MUL240026	Study of Water Currents and Bathymetry along the Southeast Coast	2024	Wexford, Waterford	To conduct a strategic modelling study of water currents and bathymetry along the Southeast Coast of Ireland	Applied	No installation corridor overlap and very low probability for any interaction.
MUL240036	Marine Site Investigations for two offshore substations	2024	Cork, Wexford, Waterford	The maritime usage proposed is for marine site investigation (SI) works to inform the engineering design and environmental assessments for two offshore substations (OSS) in the Tonn Nua Area A (as identified in the South Coast Designated Maritime Area Plan), potential offshore transmission cable corridors, approaches to seven potential landfall	Determined	<p>The main component site investigations have been completed as of 21/10/2025 (detailed in Marine Notice No. 41 of 2025), therefore no interaction with the Beaufort installation is likely.</p> <p>As part of these site investigations, two Metocean Buoys will be fixed in place until July 2026. They are well outside of the Beaufort installation corridor and will likely not be present during the cable lay in 2027.</p>

				zones, and seven landfall zones.		
FS007621	Péarla Offshore Wind Limited - Site Investigations For Export Cable Corridor For A Proposed Offshore Wind Project	2023	Off County Waterford	Site Investigations for ORE Export Cable	Applied	<p>Currently this application has not been approved, it is likely that the Beaufort cable installation will be completed before these site investigations take place.</p> <p>The Designated Maritime Area Plan (DMAP) approved in 2024 supersedes this project as it introduced a new framework on how offshore renewable energy projects can proceed.</p> <p>This new regulatory framework will likely mean this application will need to be resubmitted to MARA and the site investigations will likely not occur prior to the Beaufort installation.</p>
LIC240006	Geophysical survey for future ORE development	2024	Off the coasts of counties Wexford, Waterford and Cork	Deployment of the Marine Institute's R.V. to undertake a geophysical survey in the South Coast DMAP to inform future offshore renewable energy development.	Determined	No interaction possible - The site investigations have been completed as of 31/10/2025 (detailed in Marine Notice No. 05 of 2025).
FS007318	East Celtic Offshore Wind Park Site Investigations	2021	Off Counties Waterford and Wexford	RWE Renewables Ireland East Celtic Limited wishes to investigate the feasibility of developing an offshore wind farm and is applying for a licence to undertake site investigation activities on a site called East Celtic Offshore Wind Park in the east Celtic Sea. The site is	Applied	<p>Currently this application has not been approved, it is likely that the Beaufort cable installation will be completed before these site investigations take place.</p> <p>The Designated Maritime Area Plan (DMAP) approved in 2024 supersedes this project as it introduced a new framework on how offshore renewable energy projects can proceed.</p> <p>This new regulatory framework will likely mean this application will need to be resubmitted to</p>

				located within the 12 nautical mile limit.		MARA and the site investigations will likely not occur prior to the Beaufort installation.
FS007445	Blackwater OWL Windfarm Ltd. – Marine Surveys	2022	Off County Wexford	Blackwater OWL Windfarm Limited is seeking to undertake a variety of marine surveys at the proposed site in order to inform the specific location, design and layout of the proposed offshore wind farm and export cable route to shore. The surveys will include geophysical, geotechnical, environmental and metocean campaigns and are detailed in this foreshore licence application form and supporting documents. Specifically, the objective of the proposed Foreshore Licence Application works is to determine detailed site conditions including seafloor geology, metocean conditions and environmental characteristics.	Applied	<p>Currently this application has not been approved, it is likely that the Beaufort cable installation will be completed before these site investigations take place.</p> <p>The Designated Maritime Area Plan (DMAP) approved in 2024 supersedes this project as it introduced a new framework on how offshore renewable energy projects can proceed.</p> <p>This new regulatory framework will likely mean this application will need to be resubmitted to MARA and the site investigations will likely not occur prior to the Beaufort installation.</p>

Table 3:

Marine Licences in the Vicinity of the Installation Corridor

In-Combination Effects with Identified Projects

19.4 As the identified inshore element of the Beaufort Cable project (**FS007361**) is likely to result in very similar underwater noise/disturbance effects, the implementation of the proposed subtidal mitigation measures outlined within the NIS prepared for **FS007361** will act to eliminate any potential for in-combination effects on the qualifying interests and SCIs of European Sites within the Zone of Interest of the project. These measures will be in place for the entire cable lay.

Transboundary effects

19.5 We note that the proposed development relates to a subsea telecommunications cable located off the southeast coast of Ireland and situated entirely within Irish territorial waters. While it is acknowledged that the overall project as a whole connects to Newgale in Wales, containing elements within territorial waters of the UK, those elements are subject to a separate and distinct consenting process under the relevant UK regulatory regimes.

19.6 Having regard to the nature, scale and location of the development of this application, significant transboundary effects are not likely to arise during the construction, operational or decommissioning phases. Notification of the application will be subsequently issued to the United Kingdom Department for Levelling Up, Housing and Communities and to the Welsh Government Energy Policy team in accordance with the direction issued by An Coimisiún Pleanála on 15th April 2026.

20.0 MITIGATION MEASURES & MONITORING

20.1 Specific controls will be incorporated into the proposed development project to minimise the potential negative impacts on the ecology within the Zone of Influence (Zoi) within / proximate to the subject site are outlined below.

20.2 Minor short-term impacts may result during the installation phase of the project, but these are believed not to be at the scale to impact on designated conservation sites, species, or the site-specific conservation objectives. However, following the precautionary principle, mitigation measures have been developed to minimise the ecological impacts of the project, in relation to Natura 2000 Annex habitats and species. This is primarily because of noise disturbance and the potential for pollution within the marine environment.

Route Planning

20.3 A strict route selection process was carried out to assess the optimal route from the 12nm limit to the Irish EEZ, taking into account the lowest environmental impact and highest resource efficiency on the basis of sound and comparable data. This included addressing engineering issues as well as environmental concerns which included assessing existing infrastructure.

Construction Phase Mitigation Measures

20.4 Mitigation impacts are primarily concerned with the cable laying as minimal impacts are foreseen during the operation phase, with the exception of human intervention in relation to a break or fault in the cable. Impacts in a decommissioning stage are similar to those of the cable laying phase. Repairing the cable may involve several scenarios, such as the use of a grapnel to lift the cable on board so that repairs can be carried out at sea. As a result, the following mitigation measures will be implemented:

1. During all cable operations within Irish waters, the cable lay vessel will be operating at idle /minimal wake speeds which reduces potential collision risk with marine mammals. Plough operations will typically not exceed 0.5kn.
2. A certified Marine Mammal Observer (MMO) will be on board the vessel at all times in Irish waters to implement standard NPWS marine mammal mitigation measures. “Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters” (NPWS, 2014) will be applied to ensure noise introduced into the marine environment have minimum effect. Plough launch, seabed ploughing and plough recoveries will be conducted in consultation with the MMO.
3. Mitigation measures will include the presence of a MMO onboard the vessel. The purpose of the MMO is to ensure that there is no disturbance of seal /cetacean or other Annex IV species e.g. marine turtles, to ensure that project anthropogenic noise is minimised.
4. In line with “Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters” (NPWS, 2014) “Sound-producing activities shall only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Where effective visual monitoring, as determined by the MMO, is not possible the sound-producing activities shall be postponed until effective visual monitoring is possible” and “in waters up to 200m deep, the MMO shall conduct pre-start-up constant effort monitoring at least 30 minutes before the sound-producing activity is due to commence. Sound-producing activity shall not commence until at least 30 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO”.
5. A project ecologist (separate to the MMO) with sufficient ornithological expertise in the identification of diving seabirds will be onboard. Where the ecologist observes a significant cluster of actively diving birds in the works corridor, within 500 m of the vessel works will be mitigated based on the instruction of the ecologist. This could include slowing vessel cable laying or pausing works if there is potential for significant effect on birds.
6. Sufficient resources will be made immediately available on the vessel to deal with accidental oil spills, including hydraulic hoses bursting etc. and reported to the on-board ecologist. Ballast water discharges from project vessels will be managed under the International Convention for the Control and Management of Ships’ Ballast Water and Sediments standard (International Maritime Law: Ballast Water Management Convention).

Reinstatement

20.5 Reinstatement of the subtidal habitats should be carried out to pre-construction conditions. Any concerns in relation to the works process or resulting reinstatement of subtidal habitats to pre-works conditions will be raised with NPWS by the project ecologist prior to the removal of personnel from the site.

Post-Lay Monitoring

20.6 Given the location of the cable, buried in marine sediments, physical monitoring of the cable would pose an impact on the marine environment. Underwater cables by their nature are passive on/within the seabed. It is not expected that the cable will move, deteriorate or impact on marine habitats over time, unless impacted by anthropogenic /storm influence. As outlined by Carter *et al.* (2009) '*Unless a cable fault develops, the seabed may not be disturbed again within the system's design life.*' Problems, if they arise would be expected to result in a loss of signal and subsequent location of the break/damage and repair. The optical fibres and electrical supply in the cable are monitored 24 hours a day from the terminal station, as this is a fundamental function of the cable.

21.0 SCREENING OF SIGNIFICANCE OF ENVIRONMENTAL EFFECTS

Questions to be Considered	Yes / No /? Briefly describe	Is this likely to result in a significant impact? Yes/No/? – Why?
Brief Project Description: Installation of a fibre optic cable offshore of the coast of Co. Wexford between Irish 12nm Limit and EEZ.		
1. Will construction, operation, decommissioning, or demolition works of the Project involve actions that will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?	<p style="text-align: center;">Yes</p> <p>The installation of the cable will result in short-term, localized changes to the seabed. The process will involve seabed material being removed, the cable being installed and the reinstatement of seabed material in one pass.</p> <p>There will be no topographic or land use changes.</p>	<p style="text-align: center;">No</p> <p>The seabed is regularly disturbed by natural processes.</p> <p>The cumulative volume of sediment moved and reinstatement is very small. Any additional sediment which is not reinstated during installation will settle almost immediately.</p> <p>No likely significant impact.</p>
2. Will construction or the operation of the Project use natural resources such as land, water, materials, or energy, especially any resources which are non-renewable or are in short supply?	<p style="text-align: center;">Yes</p> <p>The installation operations will be carried out by a vessel and equipment that will use fuels such as diesel.</p>	<p style="text-align: center;">No</p> <p>No likely significant impact.</p>

3. Will the Project involve the use, storage, transport, handling or production of substances or materials which could be harmful to human health, to the environment or raise concerns about actual or perceived risks to human health?	<p style="text-align: center;">Yes</p> <p>The cable installation operations will be carried out by a vessel and/or equipment that will use fuels such as diesel and oil-based lubricants which have potential to be harmful to the environment in the event of an accidental fuel spill.</p>	<p>Normal vessel operating standards and precautions and mandatory maritime regulations such as the MARPOL Convention on Marine Pollution will ensure that the risk of an accidental release of harmful materials such as fuels will be low.</p> <p>No likely significant impact.</p>
4. Will the Project produce solid wastes during construction or operation or decommissioning?	<p style="text-align: center;">Yes</p> <p>A very small amount of non-hazardous refuse will be produced on board from the normal day to day operations of the installation vessel such as kitchen waste, consumables etc.</p>	<p>No waste material will be dumped into the sea. All refuse waste shall be stored on board the vessel and safely disposed of onshore in accordance with the MARPOL Convention.</p> <p>No likely significant impact.</p>
5. Will the Project release pollutants or any hazardous, toxic, or noxious substances to air or lead to exceeding Ambient Air Quality standards in Directives 2008/50/EC and 2004/107/EC)?	<p style="text-align: center;">No.</p>	<p>The installation will be undertaken by a vessel which complies with EU requirements in terms of operational controls and environmental standards. Air quality standards will not be exceeded.</p> <p>No likely significant impact.</p>
6. Will the Project cause noise and vibration or the releasing of light, heat energy or electromagnetic radiation?	<p style="text-align: center;">Yes</p> <p>Cable installation vessels will generate some subsea noise in the marine environment. The noise generated from the cable laying activity is relatively minor, similar in nature to trawling activities. Despite the lack of extensive underwater acoustics that would be used in a traditional marine survey, the project has the potential to introduce noise into the marine environment particularly through the use of a USBL (Ultra Short Baseline) equipment.</p>	<p>The potential impacts from the survey are described in the Supporting Information for Screening of Appropriate Assessment and Natura Impact Statement accompanying the application. The best practice guidelines “Guidance to manage the risk to marine mammals from man-made sounds in Irish waters, NPWS 2014” is the standard practice to mitigate the risk to marine mammals from subsea cable installation activities and will be implemented for the duration of the cable-laying operations. A qualified and experienced marine mammal observer (MMO) will be employed during the surveys to monitor marine mammals and log all sightings and events.</p> <p>No likely significant impact.</p>
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters,	<p style="text-align: center;">Yes.</p> <p>The vessel and/or equipment will use fuels such as diesel and oil-based lubricants which have potential</p>	<p>Normal vessel operating standards and precautions and mandatory maritime regulations such as the MARPOL Convention on Marine Pollution will ensure that the risk of an accidental release of harmful materials such as fuels will be</p>

<p>groundwater, coastal waters, or the sea?</p>	<p>to be harmful to the environment in the event of an accidental fuel spill.</p>	<p>low. Spill kits will be available on site for the duration of works.</p> <p>No likely significant impact.</p>
<p>8. Will there be any risk of accidents during construction or operation of the Project that could affect human health or the environment?</p>	<p style="text-align: center;">Yes</p> <p>The marine installation vessel will operate at low vessel speeds when carrying installation operations and will be stationary at times when deploying and recovering equipment. This may pose an increased risk of vessel-to-vessel collision.</p>	<p>A notice to mariners will be published in advance of installation operations to inform the public and other marine users in the locality. The cable lay vessel will display the appropriate lights, shapes and have active AIS. Compliance with the requirements of the International Regulations for Preventing Collisions at Sea will be always followed and it is expected that there will be no impact on shipping movements in the area. The vessel will follow appropriate Biosecurity protocols and regulations such as the International Maritime Organisation (IMO) Guidelines for the control and management of ships' ballast water, to minimise the transfer of harmful aquatic organisms and pathogens.</p> <p>No likely significant impact.</p>
<p>9. Will the Project result in environmentally related social changes, for example, in demography, traditional lifestyles, employment?</p>	<p style="text-align: center;">No</p>	<p>The installation operations are of short durations and will not result in any direct social changes such as demography, traditional lifestyles, or employment.</p> <p>No likely significant impact.</p>
<p>10. Are there any other factors that should be considered such as consequential development which could lead to environmental impacts or the potential for cumulative impacts with other existing or planned activities in the locality?</p>	<p style="text-align: center;">Yes</p> <p>The applicant is aware of proposals for renewable energy developments sites and associated marine survey in the Celtic Sea. Cumulative impact of these developments has been considered in this application.</p>	<p>The NIS and supporting information identified the installation of the Beaufort cable between its landfall in Wexford and the Irish 12nm limit (FS007361) as the only other project which may result in cumulative effects. The likely cumulative effects would be noise and vibration.</p> <p>The potential impacts from the survey are described in the Supporting Information for Screening of Appropriate Assessment and Natura Impact Statement accompanying the application. The best practice guidelines "Guidance to manage the risk to marine mammals from man-made sounds in Irish waters, NPWS 2014" is the standard practice to mitigate the risk to marine mammals from subsea cable installation activities and will be implemented for the duration of the cable-laying operations. A qualified and experienced marine mammal observer (MMO) will be employed during the surveys to monitor marine mammals and log all sightings and events.</p> <p>Commercial fishing activity, particularly mobile gear such as trawls and</p>

		<p>dredges, represents a recognised interaction pathway for subsea cables. However, with the implementation of the project’s Fisheries Management & Mitigation Strategy (detailed within the CEMP), including liaison via the Fisheries Liaison Officer and advance notifications to the fleet, no significant residual effects on fisheries are anticipated.</p> <p>No likely significant impact.</p>
<p>11. Is the project located within or close to any areas which are protected under international, EU, or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the Project?</p>	<p style="text-align: center;">Yes</p> <p>In terms of European designated sites, the Licence Area does not directly intersect with any sites. It does come into proximity of the Seas off Wexford SPA (SITECODE = 004237), Saltee Islands SPA (SITECODE = 004002), the Saltee Islands SAC (SITECODE = 000707), the Hook Head SAC (SITECODE 000764), the Carnsore Point SAC (SITECODE = 002269), the Ballyteige Burrow SAC (SITECODE = 000696), the Ballyteige Burrow SPA (SITECODE = 004020) and the Slaney River Valley SAC (SITECODE = 000781).</p> <p>There is one identified shipwreck within the installation corridor.</p>	<p>The applicant NIS concluded that, with the implementation of specified mitigations measures, the development alone or in combination with other activities, would not cause any adverse effect on the integrity of any European sites.</p> <p>No likely significant impact.</p>
<p>12. Are there any other areas on or around the location that are important or sensitive for reasons of their ecology e.g., wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests, or woodlands, that could be affected by the Project?</p>	<p style="text-align: center;">No</p>	<p>With the implementation of specified mitigations measures, the cable installation operations are not likely to cause any significant adverse impact.</p>

<p>13. Are there any areas on or around the location that are used by protected, important or sensitive species of fauna or flora e.g., for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the Project?</p>	<p>No</p>	<p>Due to the localised and temporary nature of the cable installation and with the implementation of specified mitigations measures in relation noise and general disturbance, the surveys are not likely to cause any significant adverse effects on any sensitive species of fauna or flora.</p> <p>No likely significant impact.</p>
<p>14. Are there any inland, coastal, marine, or underground waters (or features of the marine environment) on or around the location that could be affected by the Project?</p>	<p>No</p>	<p>Due to the localised and temporary nature of the cable installation and with the implementation of specified mitigations measures, the installation operations not likely to cause any significant adverse effects on the coastal zone and related water bodies.</p> <p>No likely significant impact</p>
<p>15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the Project?</p>	<p>No</p>	<p>The surveys are temporary in nature and will not present a negative impact on the landscape or scenic qualities of the area.</p> <p>No likely significant impact.</p>
<p>16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the Project?</p>	<p>No</p>	<p>No public facilities will be impacted by the project as the works are offshore.</p> <p>No likely significant impact.</p>
<p>17. Are there any transport routes on or around the location that are susceptible to congestion, or which cause environmental problems, which could be affected by the Project?</p>	<p>No</p>	<p>The installation corridor avoids major fishing, shipping, and navigation routes. No congestion of vessel movements is expected because of the cable installation operations and any disruption will be temporary and of short duration.</p> <p>No likely significant impact.</p>
<p>18. Is the Project in a location in which it is likely to be highly visible to many people?</p>	<p>No</p>	<p>The installation corridor is entirely offshore and will not be visible to the general population.</p> <p>No likely significant impact.</p>
<p>19. Are there any areas or features of historic or cultural importance on or around the location that could be affected by the Project?</p>	<p>There is one identified shipwreck within the installation corridor.</p>	<p>A Marine Archaeology Assessment has been prepared which considers the works in combination with historical and cultural sensitivity of the area. With the implementation of specified mitigations measures, no likely significant effects on cultural heritage or archaeology are foreseen.</p>

		No likely significant impact.
20. Is the Project located in a previously undeveloped area where there will be loss of greenfield land?	No	The majority of the cable installation corridor was previously developed with a previous subsea telecoms cable (ESAT-1). As the project is offshore in nature there will be no loss of greenfield land. No likely significant impact.
21. Are there existing land uses within or around the location e.g., homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying that could be affected by the Project?	No	No likely significant impact.
22. Are there any plans for future land uses within or around the location that could be affected by the Project?	No	There is no indication of any plans for future land uses that could be affected by the project. No likely significant impact.
23. Are there areas within or around the location which are densely populated or built-up, that could be affected by the Project?	No	No likely significant impact.
24. Are there any areas within or around the location which are occupied by sensitive land uses e.g., hospitals, schools, places of worship, community facilities, that could be affected by the Project?	No	No likely significant impact.
25. Are there any areas within or around the location which contain important, high quality or scarce resources e.g., groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, that could be affected by the Project?	No	No likely significant impact.

<p>26. Are there any areas within or around the location which are already subject to pollution or environmental damage e.g., where existing legal environmental standards are exceeded, that could be affected by the Project?</p>	<p>No</p>	<p>No likely significant impact.</p>
<p>27. Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g., temperature inversions, fogs, severe winds, which could cause the Project to present environmental problems?</p>	<p>Yes, Coastal fog or adverse stormy weather and related sea states can occur in the Licence Area and wider coastal / offshore marine zones.</p>	<p>The installation vessel and equipment will be operated in accordance with the weather limitations and will be fit for purpose.</p> <p>No likely significant impact.</p>

Table 4: Screening of Environmental Effects

22.0 CONSIDERATION IN RELATION TO EIA DIRECTIVE

General

22.1 The EIA Directive 2011/92/EU on the assessment of the effect of certain public and private projects on the environment, as amended by EIA Directive 2014/52/EU, sets out the process by which the likely significant effects of a project on the environment are assessed. The Planning and Development Regulations 2001 (as amended) transpose the requirements of the 2014 EIA Directive into planning consent procedures.

22.2 As stated in the regulations an environmental impact assessment (EIA) shall be carried out where either the development would be of a class specified in Part 1 of Schedule 5 of the regulations (as amended) or Part 2 of Schedule 5 of the same regulations.

- Part 1 of Schedule 5 identifies projects of a class that will always have the potential for significant environmental effects and therefore will always require an EIA.
- Part 2 of Schedule 5 identifies projects that may have an environmental impact and, therefore, thresholds or criteria have been set by member states for the requirements of EIA.

22.3 It is a matter for the An Comisiún Pleanála as the competent authority, to determine whether a formal EIA Screening determination is required having regard to the provisions of the EIA Directive and Schedule 5 of the Planning Regulations. The information in this report is provided to inform the determination on a requirement for EIA screening, and if required, to inform the screening assessment and determination.

22.4 This report does not comprise an Environmental Impact Assessment Screening Report or an Environmental Impact Assessment (EIA) Report, nor does it form part of

an Environmental Impact Assessment under the provisions of the EIA Directive 2011/92/EU, as amended by EIA Directive 2014/52/EU.

Screening for Mandatory EIA

22.5 EIA is required in one of three circumstances:

a) Project Type – Is the proposed development “a project” as understood by Article 1(2)(a) of Amended 2011/92/EU Directive? Is the proposed development of a class specified in Part 1 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) and exceeds any specified relevant quantity area or other limit specified?

Or

b) Mandatory Thresholds – Is the proposed development of a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended)? Does the Project exceed the applicable thresholds as listed in the Schedule 5 of the Planning & Development Regulations 2001 (as amended)?

Or

c) Sub-threshold Development – Is the proposed development of a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended), does not exceed the relevant quantity, area, or other limit, but is in a sensitive location and / or of a type that could lead to significant effects on the environment.

Project Type

Article 1(2)(a) of the Amended 2011/92/EU Directive provides the following definition for a project: *“the execution of construction works or of other installations or schemes”* and *“other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources”*.

22.6 The proposed development comprises the installation of subsea cable infrastructure, including cable laying and burial operations, using specialist marine vessels. The works are temporary in nature, linear, and of limited duration, with

seabed interaction confined to a narrow corridor along the cable route. No permanent above-seabed structures are proposed as part of the development.

22.7 A review of the project types listed in Part 1 of Schedule 5 of the Planning and Development Regulations 2001 (as amended) has been undertaken. The proposed cable installation works do not fall within any project type or class of development listed in Part 1 of Schedule 5

Mandatory Thresholds

A review of the project types in Part 2 of Schedule 5 has been considered in the preparation of this report. The proposed cable installation works do not fall within any project type or class of development listed in Part 2 of Schedule 5 and do not exceed any applicable mandatory thresholds.

Sub Threshold Development

It is the view of the applicant that the proposed cable installation works do not comprise a project for the purposes of EIA and do not fall within any class of development to which the EIA Directive applies, nor do they require mandatory EIA as defined in Schedule 5 (Parts 1 and 2) of the Planning and Development Regulations. The proposed works are temporary and short-term in nature, are spatially limited, and are not of a type, scale, or location that could give rise to significant effects on the environment.

COMMON ABBREVIATIONS

AA	Appropriate Assessment
AIMU	Assessment of Impact of the Maritime Usage
AIS	Automatic Identification System
BIM	Bord Iascaigh Mhara
CO	Conservation Objective
CPT	Cone Penetration Test
DAFM	Department of Agriculture, Food and the Marine
DAHG	Department of Culture, Heritage and the Gaeltacht
DHLGH	Department of Housing, Local Government and Heritage
EC	European Commission
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EPA	Environment Protection Agency
EPS	European Protected Species
EU	European Union
FLO	Fisheries Liaison Officer
HABs	Harmful Algal Blooms
ICES	International Council for the Exploration of the Sea
IMO	International Maritime Organization
ISO	International Organization for Standardization
ITM	Irish Transverse Mercator
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effects
MAP	Marine Area Planning Bill
MARPOL	The International Convention for the Prevention of Pollution from Ships
MBES	Multibeam echosounder
MI	Marine Institute
MMO	Marine Mammal Observer
NIS	Natura Impact Statement
NM	Nautical Mile
NPWS	National Parks and Wildlife Service
NSER	Non-Statutory Environmental Report
PTS	Permanent Threshold Shift
SCI	Special Conservation Interest
SISAA	Supporting Information for Screening for Appropriate Assessment
SPL	Sound Pressure Level
SSS	Side Scan Sonar
SWD	Shellfish Waters Directive
TTS	Temporary Threshold Shift
UTM	Universal Transverse Mercator
VC	Vibrocore
VMS	Vessel Electronic Monitoring System
WGS	World Geodetic System

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