1. Ms. Martina Gallagher, Higher Executive Officer √m Gallagher 15/5/18
2. Ms Jeannine Dunne, Assistant Principal J. Dunne 17/5/18
3. Mr. Roger Harrington, Principal Approved.

Foreshore Licence application by EirGrid PLC in respect of geotechnical and environmental marine survey works at Ballinwilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork

Ref: FS 006811

1. **Application:** The approval of the Minister is sought to grant a licence for a term of one (1) year under Section 3(3) of the Foreshore Act 1933 to Eirgrid plc for the purpose of carrying out geotechnical and environmental marine survey works at Ballinwilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork to investigate the feasibility of installing a subsea power cable interconnector between Ireland and France.

   Foreshore licence maps (1 to 3) indicating the location of the survey works are attached at ***Tab 1.***

   The proposed marine survey works form part of those being carried out for the Celtic Interconnector which is a proposed 700MW electricity link connecting Ireland and France. These marine surveys follow on from previous surveys (for which foreshore licences were granted under FS 006243, FS 006446 and FS 006722). The total size of the survey area (two survey corridors to the 12nm limit) is approximately 32.92 square kilometres. A Schedule of Survey works is attached at ***Tab 2***.

2. **Companion Consents:** Planning permission in not required for Marine Survey works such as these.

3. **Public Consultation**: A public notice concerning this application was published in the "Irish Examiner" and "Evening Echo" on January 18th 2018. The application documents were made available for inspection at Ballycotton Garda Station, Ballycotton, Co. Cork, Youghal Garda Station, O'Brien's Place, Youghal, Co. Cork and Midleton Garda Station, Midleton, Co. Cork for the required period of twenty one (21) working days (January 18th to February 16th 2018).

   One (1) public submission was received on foot of the public consultation expressing concerns about possible impacts on shrimp gear. In their response the applicant stated that the survey works were proposed to take place in May, outside of the shrimp fishing season.

4. **Prescribed Bodies Consultation:** Written submissions on the proposed development were received from this Department's Water and Marine Advisory Unit (WMAU), the Marine Institute, the Department of Agriculture,

Food and the Marine, the Marine Survey Office, Inland Fisheries Ireland, Cork County Council, the Underwater Archaeology Unit and National Parks and Wildlife Service of the Department of Culture, Heritage and the Gaeltácht, and the Sea Fisheries Protection Authority.

There were no objections to the proposed development.

5. **Environmental Assessment:**

EIA Screening: The proposed works are not of a class that requires a mandatory EIS under the EIA Directive. ***Tab 3***

Appropriate Assessment: The project was screened for Appropriate Assessment (AA). A Finding of No significant Effects Report has determined that there will be no significant adverse effects as a result of the proposed works on the Conservation Objectives of Ballycotton Bay SPA (Site Code: 004022), Ballymacoda (Clonpriest and Pillmore) SAC (Site Code: 000077), Ballymacoda Bay SPA (Site Code: 004023), Blackwater River (Cork/Waterford) SAC (Site code 002170), and Blackwater Estuary SPA (Site Code 004028) ***Tab 4***.

Marine Lease Vetting Committee (MLVC) assessment and report:

Considering the nature, scale and location of the proposed work the MLVC concludes that, subject to compliance with the conditions set out below at **Tab 6**, the proposed works would not have a significant negative impact on the marine environment, would not adversely impact on any Natura 2000 site and therefore, is agreeable to the grant of the licence to facilitate the proposed development. See report attached at ***Tab 5.***

6. **Financial Considerations:**

EirGrid PLC has accepted the licence fee of

7. **Agreement of applicant:** Eirgrid PLC has agreed to the specific conditions which would be attached to the licence, if granted. ***Tab 6***

8. **Recommendation:**

Having regard to:

- the application for a Foreshore Licence together with accompanying documents;
- the submissions received from prescribed bodies;
- the public consultation undertaken;
- the public submission received;
- the AA screening performed;
- the EIA screening performed;
- the assessment of the proposed development by the Marine Licence Vetting Committee, and its conclusions and recommendations in this regard; and

- the consent conditions to be attached to the Foreshore Licence, if granted

it is considered that:

- the proposed works on the foreshore would not have a significant negative impact on the marine environment and would not adversely affect the integrity of the Natura 2000 sites.

It is recommended that a foreshore licence be granted subject to the conditions recommended by the MLVC and the licence fee set out above.

9. Notification of Minister's Determination:

If approval is granted by the Minister, EirGrid PLC will be informed accordingly, an appropriate licence will issue and a Notice of Determination regarding the decision (including the reasons) will be published on the Department's website. The Notice of Determination will address:

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

Submitted, please, to grant a licence under Section 3(3) of the Foreshore Act, 1933. The draft licence (in duplicate) in the pouch across is submitted for signing please.

Patrick O'Neill
14 May 2018

ATTACHMENT A: SCHEDULE OF SURVEY WORKS

Schedule of Survey Works
Geotechnical and Environmental Survey

Geotechnical Survey

A geotechnical sampling and testing programme will be undertaken along the cable route corridors in order to evaluate the nature and mechanical properties of the superficial seabed sediments and inter-tidal sediments.

Approximate locations of the proposed geotechnical sites have been provided in the Foreshore Licence Maps, please refer to Attachment C, however, the exact location of the geotechnical sampling sites within the survey corridors will be determined following the completion of the interpretation of the data from the completed geophysical marine survey (ref FS 006722). Please note that the locations of the proposed geotechnical sites are best estimates and may be subject to change based on the results of the geophysical survey.

a. Intertidal Survey (HWM to LWM)

i) Bore Holes / Trial Pits

Method: Depending upon requirement identified from interpretation of the geophysical data, approximately 9 bore holes and/or 9 trial pits will be drilled / dug in order to determine soil conditions in the intertidal zone. The maximum depth below surface for boreholes and trial pits will be up to 20 metres and 3 metres respectively. The trial pits will typically be 3m x 1m in size whilst bore hole will be approximately 10cm in diameter. The trial pits will be backfilled using only native material and the borehole will not be backfilled but instead will re-fill naturally.

The equipment to be used will include the following or similar;

- Bore hole – MI6 Massenza Drilling Rig / Pagani TG 63-200 Penetrometer
- Trial Pit - Backhoe loader, JCB 3CX or 4CX

The Backhoe loader and MI6 Massenza drilling rig are approximately 5.5m x 2.25m and 3m x 1m respectively. Both pieces of equipment would be driven onto beach via public access points. The drilling of boreholes may be complemented at certain locations by the Pagani TG 63-200 penetrometer which is approximately 2.3m x 1.1m and would also be driven onto beach via public access points.

The tidal range at each landfall location shall be used to plan operations in order that the investigations can be undertaken with the most suitable plant and equipment and extend outwards to join and overlap the Shallow Water Survey at approximately 10m water depth.

The intertidal range is considerable and will therefore require careful consideration in terms of deployment and setting-up of the survey. Careful consideration will also have to be given to managing the time available to perform the services. The approximate locations of trial pits and bore holes have been shown on the Foreshore Licence Maps 1 and 2, please refer to Attachment C.

Survey Parameters:	Spacing:	100m (nominal)
	No.:	9 boreholes / 9 trial pits
	Depth:	20m / 3m

ii) Thermal Resistivity

Field Testing – Method: Thermal conductivity testing will be performed on soil samples recovered from the land/intertidal samples at 1m intervals from the surface to 4m below ground level, or otherwise directed. Samples will be tested at the natural moisture content.

Laboratory testing – Thermal conductivity tests will be performed on soil samples from surface to 4m below ground level to assess the suitability of the soil for backfilling and landfall trench. At each location it is envisaged 5 tests will be performed.

Location: Intertidal component of intertidal and shallow water survey area of Foreshore Licence Area 1 and 2 (as shown on Foreshore Licence Map 1 and 2 in Attachment C).

b. Shallow Water Survey Area (LWM to 10m LAT)

i) Vibrocore

Method: Vibrocores will be used to understand the sedimentary environment between LWM to 10m LAT. The base case is for 7 vibrocores to be acquired with a distance of 1,000m or so between each sample. This base case will need to be reviewed based on seismic interpretation of soil conditions. The standard vibrocore shall have a 5m depth capability and a 75mm nominal core diameter.

Survey Parameters:

Interval:	1,000m
Sites:	7
Depth:	5m

ii) Cone Penetrometer Testing (CPT)

Method: CPTs will be used to understand the sedimentary environment between LWM to 10m LAT. The base case is for 7 CPTs to be acquired with a distance of 1,000m or so between each sample. This base case will need to be reviewed based on seismic interpretation of soil conditions. The penetrometer will have a maximum depth penetration of 5m below seabed.

Survey Parameters:

Interval:	1,000m
Sites:	7
Depth:	5m

iii) **Rock Coring (Optional)**

In the event of a failure to achieve sample recovery using the CPT and/or Vibrocore methodology at the planned shallow water survey locations, a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling.

Method: In the shallow water survey area, rock coring may be performed using a drilling rig deployed upon a Jack up barge which would typically have an operating water depth limit of 16m.

iv) **Thermal Resistivity Testing** – Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical shallow water survey.

c. Offshore Survey Area (10m LAT to 12nm Limit)

i) **Vibrocore**

Method: The base case is for vibrocoring to be conducted every 1,500m or so giving a total requirement of 39 vibrocores in Irish waters. This will be confirmed based upon the interpretations of soil conditions from seismic operations conducted during the geophysical survey. The decision to undertake vibrocoring and CPTs at the same or separate locations will also be based on the findings from seismic operations conducted during the geophysical survey.

Soundings will be acquired across the offshore survey area to provide full seabed bathymetric coverage.

Survey Parameters:

Interval:	1,500m
Sites:	39
Depth:	5m

ii) **Cone Penetrometer Testing (CPT)**

Method: The base case is for CPTs to be conducted every 1,500m or so giving a total requirement of 39 CPTs in Irish waters. This will be confirmed based upon the interpretations of soil conditions from seismic operations conducted during the geophysical survey. The decision to undertake vibrocoring and CPTs at the same or separate locations will also be based on the findings from seismic operations conducted during the geophysical survey.

Survey Parameters:

Interval:	1,500m
Sites:	39
Depth:	5m

iii) Rock Coring (Option)

In the event of a failure to achieve sample recovery using the CPT and/or Vibrocore methodology at the planned offshore survey locations, a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling.

Method: In the offshore survey area any rock coring may be performed using a compensated drilling rig operating from a dedicated vessel or by way of a seabed drilling rig.

iv) Thermal Resistivity Testing – Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical offshore survey.

v) Ground-Truthing

Should on-site interpretation of the side scan sonar data indicate anomalous areas of seabed that require further qualification, the area shall be ground-truthed. Ground-truthing will be undertaken using still photography, or grab sampling if the former technique doesn't provide a clear image. If required, the number of grab samples is likely to be low and typically involves a sample of 10 litres or less, taken from the seabed.

Environmental Survey

The environmental survey will be used to map the distribution and extent of marine benthic habitats from the interpretation of the geophysical survey for the cable route corridors. This will comprise a benthic sampling programme and video or still photographs based upon interpretation of the geophysical data. The sampling locations will be determined based on the physical characteristics of the seabed, based on interpretation of the results of the geophysical survey.

Additional sediment samples may be acquired for later chemical analysis to determine the concentration of potential pollutants.

The programme base scope is based upon site intervals given below, although will be dependent upon the diversity of benthic habitats.

a. Land/Intertidal Survey (HWM to LWM)

Method: Beach inspection and survey at each shore in Ireland.

b. Shallow Water Survey Area (LWM to 10m LAT)

Method: Use of grab sampling and still or video camera. Grab samples will be collected as required for aiding side scan sonar interpretation.

Sampling Sites: 3

c. Offshore Survey Area (10m LAT to 12nm Limit)

Method: Sampling intervals will be nominally every 15-20km. Use of grab sampling and still or video camera.

Sampling Sites: 6

Foreshore Guidance Document

Screening for EIA

EIA Directive (85/337/EEC as amended by 97/11/EC and 2003/35/EC) requires that certain developments be assessed for likely environmental effects (environmental impact assessment) before consent can be granted. When submitting an application for such a development on the foreshore, the applicant must also submit an Environmental Impact Statement (EIS). General EIA requirements are set out in the EC (EIA) Regulations 1989 (as amended) including Schedules 1 and 3 inserted by the EIA regulations 1999 (S.I. No. 93 of 1999).

In the case of development which is under the relevant threshold, the consent authority is required to request an EIS where it considers that the proposed development is likely to have significant environmental effects. The decision as to whether a development is likely to have such effects must be taken with reference to the criteria set out in Schedule 3 inserted by the 1999 regulations and the national guidance developed to assist.

Name of Proposed Development: Geotechnical and Environmental Marine Survey Works at Ballinwilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork

Foreshore Reference, where applicable: FS 006811

Question 1: Is the proposed development included in the 1st Schedule of the Regs?

- If Yes: EIA is required.
- If No, proceed to Q2.

Answer: No

Question 2: Is the proposed development of a type/class included in the 1st Schedule but below the threshold specified?

- If Yes, but the development is below the quantity/area/other threshold, proceed to Q3.
- If No, no EIA required.

Answer: No

Question 3: Are significant effects likely?

To decide whether significant effects are likely, use the 3rd Schedule of the 1999 regs (via the EIA Screening Checklist and, where required, the EIA Significant Effects Checklist):

- If Yes, significant effects are likely; an EIA is required.
- If No, no significant effects are likely; no EIA is required.

Answer: _____

Access to Information:

- The decision-making process must be documented.
- A record of the decision and the decision-making process must be made public.

Finding of no significant effects report:

Name of project or plan:	EirGrid– Foreshore Licence application for geotechnical and environmental site investigations (FS006811).
Name and location of Natura 2000 site	The project is not located within a Natura 2000 site. There are 5 Natura 2000 sites located within 10Km of the proposed survey area. These sites include: • **Ballycotton Bay SPA (Site Code 004022)** – The Ballinwilling landfall survey corridor is circa 1.25Km from this site. • **Ballymacoda (Clonpriest and Pillmore) SAC (Site Code 000077)** – The Redbarn / Claycastle landfall corridor is circa 1.5Km from this site and the Ballinwilling landfall survey corridor is circa 7.9Km (by sea) from this site • **Ballymacoda Bay SPA (Site Code 004023)** - The Redbarn landfall survey corridor is immediately adjacent to this site, the Claycastle landfall corridor is circa. 1 Km from this site while the Ballinwilling landfall survey corridor is circa 5Km by land from this site. • **Blackwater River (Cork / Waterford) SAC (Site Code 002170)** – The Claycastle landfall corridor is circa 1Km from this site, the Redbarn landfall survey corridor is circa 1.5Km from this site. • **Blackwater estuary SPA (Site Code 004028)** - The Claycastle landfall corridor is circa 2.5Km from this site while the Redbarn landfall survey corridor is circa 3Km from this site. The Conservation Objectives for the Ballycotton Bay SPA are[1]:

[1] NPWS (2014) Conservation Objectives: Ballycotton Bay SPA 004022. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- To maintain the favourable conservation condition of Teal in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Ringed Plover in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Golden Plover in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Grey Plover in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Lapwing in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Black-tailed Godwit in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Bar-tailed Godwit in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Curlew in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Turnstone in Ballycotton Bay SPA,
- To maintain the favourable conservation condition of Common Gull in Ballycotton Bay SPA
- To maintain the favourable conservation condition of Lesser Black-backed Gull in
- Ballycotton Bay SPA
- To maintain the favourable conservation condition of the wetland habitat in Ballycotton Bay SPA as a resource for the regularly occurring migratory birds that utilise it.

The Conservation Objectives for the Ballymacoda (Clonpriest and Pillmore) SAC are[2]:

- To maintain the favourable conservation condition of Estuaries in Ballymacoda (Clonpriest and Pillmore) SAC,

[2] NPWS (2015) Conservation Objectives: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 2. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Ballymacoda (Clonpriest and Pillmore) SAC
- To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in Ballymacoda (Clonpriest and Pillmore) SAC
- To maintain the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae) in Ballymacoda (Clonpriest and Pillmore) SAC

The Conservation Objectives for the Ballymacoda Bay SPA are[3]:

- To maintain the favourable conservation condition of Wigeon in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Teal in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Ringed Plover in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Golden Plover in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Grey Plover in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Lapwing in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Sanderling in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Dunlin in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Black-tailed Godwit in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Bar-tailed Godwit in

[3] NPWS (2015) Conservation Objectives: Ballymacoda Bay SPA 004023. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Ballymacoda Bay SPA

- To maintain the favourable conservation condition of Curlew in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Redshank in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Turnstone in Ballymacoda Bay SPA
- To maintain the favourable conservation condition of Black-headed Gull in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Common Gull in Ballymacoda Bay SPA,
- To maintain the favourable conservation condition of Lesser Black-backed Gull in
- Ballymacoda Bay SPA
- To maintain the favourable conservation condition of the wetland habitat in Ballymacoda Bay SPA as a resource for the regularly occurring migratory birds that utilise it.

The Conservation Objectives for the Blackwater River (Cork / Waterford) SAC are[4]

- To restore the favourable conservation condition of the Freshwater Pearl Mussel in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of White clawed Crayfish in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Sea Lamprey in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Brook Lamprey in the Blackwater River (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of River Lamprey in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation

[4] NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

condition of Twaite Shad in the Blackwater River (Cork/Waterford) SAC

- To maintain the favourable conservation condition of Atlantic Salmon in the Blackwater River (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of Estuaries in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Perennial vegetation of stony banks in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the Blackwater River (Cork/Waterford) SAC,
- To restore the favourable conservation condition of Atlantic salt meadows (Glauco Puccinellietalia maritimae) in the Blackwater River (Cork/Waterford) SAC,
- To restore the favourable conservation condition of Otter in the Blackwater River
- (Cork/Waterford) SAC,
- To maintain the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Killarney Fern in the Blackwater River (Cork/Waterford) SAC
- To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho Batrachion vegetation in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Old sessile oak woods with Ilex and Blechnum in the Blackwater River (Cork/Waterford) SAC
- To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno Padion, Alnion incanae, Salicion albae) in the Blackwater River (Cork/Waterford) SAC,

	The Conservation Objectives of the Blackwater Estuary SPA are:[5] • To maintain the favourable conservation condition of Wigeon in Blackwater Estuary SPA • To maintain the favourable conservation condition of Golden Plover in Blackwater Estuary SPA • To maintain the favourable conservation condition of Lapwing in Blackwater Estuary SPA, • To maintain the favourable conservation condition of Dunlin in Blackwater Estuary SPA • To maintain the favourable conservation condition of Black tailed Godwit in Blackwater Estuary SPA, • To maintain the favourable conservation condition of Bar tailed Godwit in Blackwater Estuary SPA, • To maintain the favourable conservation condition of Curlew in Blackwater Estuary SPA • To maintain the favourable conservation condition of Redshank in Blackwater Estuary SPA, • To maintain the favourable conservation condition of the wetland habitat in Blackwater Estuary SPA as a resource for the regularly occurring migratory water birds that utilise it
Description of the project or plan	Geotechnical and environmental site investigation surveys on the foreshore along 2 No. routes off the south coast of Ireland with landfall at Ballinawilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork. The surveys will be carried out seaward of the three landfalls within two survey corridors which converge with the previous survey corridors close to the 12nm limit. The survey routes are

[5] NPWS (2012) Conservation Objectives: Blackwater Estuary SPA 004028. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

shown on the Drawing submitted by the applicant entitled:

- "Celtic Interconnector Foreshore Licence Map 1 Redbarn Beach and Claycastle Beach", dated December 20th 2017
- "Celtic Interconnector Foreshore Licence Map 2 Ballinwilling Strand", dated December 20th 2017
- "Celtic Interconnector Foreshore Licence Map 3 Offshore Survey Area", dated December 20th 2017

The works would be carried out in the following areas:

- Intertidal survey - from 50m landward of the high water mark (HWM) to the charted low water mark (LWM) at each landfall site
- Shallow water survey - from the LWM seawards to first 10m Lowest Astronomical Tide (LAT) water depth
- Offshore survey - seawards to first 10m (LAT) water depth to the 12nm limit.

The survey corridors will be nominally 250m wide for the land/intertidal and shallow water survey works (approximately 100m – 200m from landfall within a 1000m wide area to allow for flexibility in the location of the final land/intertidal survey corridor) and 500m wide for the offshore survey works. The total length of the survey area (two survey corridor to the 12nm limit) is approximately 65.84km.

Details of the proposed Geotechnical and Environmental works are set out in the document entitled "Schedule of Survey Works", submitted by the applicant as Appendix A of the application form. The works will include

- Drilling of a total of 9 bore holes and / or excavation of 9 trial pits in the intertidal area at the landfall locations. The maximum depth of the boreholes and trial pits would be 5m and 3m respectively.

The trial pits will typically be 3m x 1m in size whilst bore hole will be approximately 10cm in diameter. The trial pits will be backfilled using only native material and the borehole will not be backfilled but instead will re-fill naturally. Thermal resistivity / conductivity testing would be carried out at these locations.

- Vibrocoring and Cone Penetration Testing (CPT) at approximately 1000m intervals in the area from the LWM to the 10m LAT depth contour. It is anticipated that a minimum of 7 vibrocores and 7 CPTs would be collected in this area. The cores would have a nominal diameter of 75mm with a maximum depth of 5m. The penetrometer would have a maximum depth penetration of 5m. In the event of a failure to achieve sample recovery using Vibrocoring or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling. In the shallow water survey area, rock coring may be performed using a drilling rig deployed upon a Jack up barge which would typically have an operating water depth limit of 16m. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical shallow water survey. Grab sampling and still / video photography will also be carried out in this area at a total of 3 locations. Grab samples will be collected as required for aiding side scan sonar interpretation
- Vibrocoring and Cone Penetration Testing (CPT) at approximately 1500m intervals in the area from the 10m LAT depth contour to the 12nm limit. It is estimated that a total of 39 vibrocores and 39 CPTs would be collected in this area. In the event of a failure to achieve sample recovery using Vibrocoring or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site

	of any failed sampling. In this survey area any rock coring may be performed using a compensated drilling rig operating from a dedicated vessel or by way of a seabed drilling rig. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical offshore survey Grab sampling at approximately 15 – 20Km intervals will also be carried out in this area at a total of 6 locations. Indicative locations for Vibrocoring, Cone Penetration Testing (CPT), borehole drilling and trail pit excavation are shown in the following drawings submitted by the applicant • "Celtic Interconnector Foreshore Licence Map 1 Redbarn Beach & Claycastle Beach", dated 20/12/2017 • "Celtic Interconnector Foreshore Licence Map 2 Ballinwilling Strand", dated 20/12/2017 • "Celtic Interconnector Foreshore Licence Map 3 Offshore Survey Area", dated 20/12/2017 It is anticipated that the site investigations would be completed within approximately 30 days, subject to suitable weather conditions.
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No.
Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?	No
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.	The works could potentially; Cause disturbance to species listed as qualifying interests of the adjacent Natura 2000 sites as a

	result of the physical presence of personnel / equipment/ vessel during the survey • Cause disturbance to species listed as qualifying interests of the adjacent Natura 2000 sites and species listed in Annex IV of the Habitats Directive as a result of the introduction of noise to the marine environment from the survey techniques • introduce pollutants into the water column during the course of the survey
Explain why these effects are not considered significant.	None of the survey activity will take place within a Natura 2000 site. The survey activity will take place outside the adjacent SPAs and SAC and thus will not have a direct impact on any habitats within these sites. There will not be significant disturbance to key habitats or species. Additionally there will be no habitat or species fragmentation and the overall integrity of the sites will not be affected. There may be disturbance to birds visiting from the SPAs along the survey route. Such disturbance would be localised and of very short duration. There will be no direct discharge of pollutants into the environment during the works and water quality will not be affected. Full compliance with the requirements set out in Section 4.3.4 of the NPWS (2014) "Guidance to Manage the Risk to Marine Mammals from Man-made Sound sources in Irish Waters" will minimise any interactions with marine mammals in the survey area. Considering the location and short duration of the survey activity significant adverse impacts on migratory fish species including salmon and lamprey species using the Blackwater Estuary are not considered likely.

	On the basis of the above it is considered that there will be no significant adverse effects as a result of the geotechnical and environmental site investigations as proposed , on the 'qualifying interests' or the 'conservation objectives' of the adjacent Ballycotton Bay SPA, Ballymacoda (Clonpriest and Pillmore) SAC, Ballymacoda Bay SPA, the Blackwater River (Cork / Waterford) SAC or the Blackwater estuary SPA
Who carried out the assessment?	Barry Mc Donald M.Eng. , MLVC, May 11 2018.

REPORT OF THE MARINE LICENCE VETTING COMMITTEE (MLVC)

on

FORESHORE LICENCE APPLICATION FOR GEOTECHNICAL AND ENVIRONMENTAL SITE INVESTIGATION WORKS (FS006811).

APPLICANT: EIRGRID

Mr. Barry McDonald M.Eng.
Marine Licence Vetting Committee
11 May 2018

EirGrid– Foreshore Licence application for geotechnical and environmental site investigations (FS006811).

Project Description

EirGrid has submitted an application for a Foreshore Licence to carry out geotechnical and environmental site investigation surveys on the foreshore along 2 No. routes off the south coast of Ireland with landfall at Ballinawilling Strand, Redbarn Beach and Claycastle Beach, Co. Cork.

The proposed site investigation surveys form part of the works investigating the feasibility of installing a subsea power cable interconnector between Ireland and France.

As part of this project, geophysical, geotechnical and environmental site investigation surveys in this area were carried out during 2014 and 2015 by the applicant under separate Foreshore Licences (FS 006243 & FS 006446). Following a review of the findings of these surveys, it was determined by EirGrid that further geophysical, geotechnical and environmental marine surveys along additional routes were required to provide further options for the proposed cable route.

Geophysical site investigation surveys along the additional routes were completed in October 2017 under Foreshore Licence FS 006722 and the current proposal relates to the carrying out of geotechnical and environmental surveys along these same route corridors to complete the site investigations.

It is proposed to carry out the surveys seaward of the three landfalls, at Ballinwilling Strand, Redbarn Beach and Claycastle Beach in east Cork, within two survey corridors which converge with the previous survey corridors close to the 12nm limit. The survey corridors are shown on the following Drawing submitted by the applicant:

- Drawing No. XDN-MAP-GP0002-002 "Celtic Interconnector Geotechnical & Environmental Survey FS006811 Site Location Map", Rev 0, dated 20/12/2017.

The proposed geotechnical and environmental survey is identical in nature and methodology to the previous geotechnical and environmental survey carried out in 2015. The proposed survey methodology is set out in the "Schedule of Works" presented at Appendix A of the Application form and includes:

- Drilling of a total of 9 bore holes and / or excavation of 9 trial pits in the intertidal area at the landfall locations. The maximum depth of the boreholes and trial pits would be 5m and 3m respectively. The trial pits will typically be 3m x 1m in size whilst bore hole will be approximately 10cm in

diameter. The trial pits will be backfilled using only native material and the borehole will not be backfilled but instead will re-fill naturally. Thermal resistivity / conductivity testing would be carried out at these locations.

- Vibrocoring and Cone Penetration Testing (CPT) at approximately 1000m intervals in the area from the LWM to the 10m LAT depth contour. It is anticipated that a minimum of 7 vibrocores and 7 CPTs would be collected in this area. The cores would have a nominal diameter of 75mm with a maximum depth of 5m. The penetrometer would have a maximum depth penetration of 5m. In the event of a failure to achieve sample recovery using Vibrocoring or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling. In the shallow water survey area, rock coring may be performed using a drilling rig deployed upon a Jack up barge which would typically have an operating water depth limit of 16m. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical shallow water survey. Grab sampling and still / video photography will also be carried out in this area at a total of 3 locations. Grab samples will be collected as required for aiding side scan sonar interpretation.

- Vibrocoring and Cone Penetration Testing (CPT) at approximately 1500m intervals in the area from the 10m LAT depth contour to the 12nm limit. It is estimated that a total of 39 vibrocores and 39 CPTs would be collected in this area. In the event of a failure to achieve sample recovery using Vibrocoring or Cone Penetration Testing methodology a rock corer may be deployed in order to obtain samples of the required length and quality at or in close proximity to the site of any failed sampling. In this survey area any rock coring may be performed using a compensated drilling rig operating from a dedicated vessel or by way of a seabed drilling rig. Thermal resistance/conductivity testing is required upon soil horizons identified during the geotechnical offshore survey Grab sampling at approximately 15 – 20Km intervals will also be carried out in this area at a total of 6 locations.

Indicative locations for Vibrocoring, Cone Penetration Testing (CPT), borehole drilling and trail pit excavation are shown in the following drawings submitted by the applicant

- "Celtic Interconnector Foreshore Licence Map 1 Redbarn Beach & Claycastle Beach", dated 20/12/2017
- "Celtic Interconnector Foreshore Licence Map 2 Ballinwilling Strand", dated 20/12/2017
- "Celtic Interconnector Foreshore Licence Map 3 Offshore Survey Area", dated 20/12/2017

It is anticipated that the site investigations would be completed within approximately 30 days, subject to suitable weather conditions.

The project is not of a class that requires the submission of an Environmental Impact Statement.

The project is not located within a Natura 2000 site. There are 5 Natura 2000 sites located within 10Km of the proposed survey area. These sites included:

- Ballycotton Bay SPA (Site Code 004022)
- Ballymacoda (Clonpriest and Pillmore) SAC (Site Code 000077)
- Ballymacoda SPA (Site Code 004023)
- Blackwater River (Cork / Waterford) SAC (Site Code 002170)
- Blackwater Estuary SPA (Site Code 004028)

A separate assessment of the impacts of the proposed site investigations on the Conservation Objectives of these Natura 2000 site has been carried out.

Public Consultation

A public notice concerning this application was published in the "Irish Examiner" and "Evening Echo" on January 18th 2018. The application documents were made available for inspection at Ballycotton Garda Station, Ballycotton, Co. Cork, Youghal Garda Station, O'Brien's Place, Youghal, Co. Cork and Midleton Garda Station, Midleton, Co. Cork for the required period of twenty one (21) working days (January 18th to February 16th 2018).

One (1) public submission was received on foot of the public consultation expressing concerns about possible impacts on shrimp gear.

Prescribed Bodies Consultation:

Observations on the project were received from this Department's Water and Marine Advisor, the Development Applications Unit of DCHG (Nature Conservation and Underwater Archaeology), Aquaculture and Foreshore Management Division of DAFM, Marine Institute, Inland Fisheries Ireland, Sea Fisheries Protection Authority, Marine Survey Office, and Cork County Council.

There were no objections to the proposed site investigations. IFI commented on potential impacts on fish, including migratory salmon and lamprey species, and sea-angling.

Issues Considered

The following documents were considered:

- Foreshore Licence Application submitted by EirGrid and accompanying Attachments including:

    - Attachment A: Schedule of Survey Works
    - Attachment B: Site Location Map
    - Attachment C: Foreshore Licence Map
    - Attachment D: Protected Sites with 10Km of the project site
    - Attachment E: Stage 1 – Screening for Appropriate Assessment
    - Attachment F: Marine Mammal Risk Assessment
    - Attachment G; EirGrid Company Information (for administrative use by Foreshore Section only).
    - Attachment H: Pre-application consultation with stakeholders

- Written submissions from the Water and Marine Advisory Unit of DHPLG, the Development Applications Unit of DCHG (Nature Conservation and Underwater Archaeology), Aquaculture and Foreshore Management Division of DAFM, Marine Institute, Inland Fisheries Ireland, Sea Fisheries Protection Authority, Marine Survey Office and Cork County Council.

- Applicant's responses to the Prescribed Body submissions.

- One (1) public submission and the Applicant's response to the submission.

MLVC Conclusions

On the basis of the information provided by the applicant and the observations provided by the State Bodies as listed above, the MLVC concludes that, subject to compliance with the specific conditions set out below, the proposed works would not have a significant negative impact on navigation, fishing, the marine environment or protected species, would not impact on other legitimate uses or users of the foreshore area in question and would not have a significant effect on the qualifying interests of the adjacent Natura 2000 sites. The MLVC, therefore, recommends that a licence be granted.

Proposed Licence Conditions

1. The Licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.

2. During the course of the works in the intertidal area public access onto and along the adjacent foreshore shall be maintained.

3. No refuelling of equipment, machinery or plant shall take place on the foreshore.

4. No storage of machinery or plant shall take place on the foreshore.

5. The works shall be conducted in accordance with Attachment A: Schedule of Survey Works, Dated: 20/12/2017 and all documents submitted with the application.

6. Intertidal and near-shore works shall be conducted outside of the bathing season (June 1st to September 15th) and on weekdays only. If works are required within the Bathing Season or on weekends the Licensee is required to get the prior consent of Cork County Council to ensure no undue impact on beach users.

7. The Licensee shall notify the following Departments of Cork County Council in advance of the survey works: the East Cork Municipal District; Divisional Services South Cork (Beach Management) and Environment Department.

8. The Licensee shall notify the Department of Housing, Planning and Local Government at least 14 days in advance of the commencement of the works on the foreshore.

9. In addition to a Marine Notice, the Licensee shall forward a proposal of work to the Deputy Chief Surveyor of the Marine Survey Office which should include details of all vessels to be employed in the venture.

10. The Licensee shall ensure that all vessels/floating plant have appropriate certification from the Marine Survey Office.

11. The Licensee shall consult with the local Harbour Master prior to the commencement of any works."

12. The Licensee shall be fully compliant with the requirements set out in Section 4.3.4 of the NPWS (2014) "Guidance to Manage the Risk to Marine Mammals from Man-made Sound sources in Irish Waters". This document is available to download at: http://www.npws.ie/marine/bestpracticeguidelines/

13. The geotechnical investigation works on the intertidal foreshore shall be subject to full archaeological monitoring.

14. A suitably qualified and experienced archaeologist shall be engaged to carry out the monitoring.

15. An excavation licence shall be applied for from the Licensing Section, National Monuments Service, to cover the monitoring and a detailed method statement shall accompany the licence application.

16. No archaeological monitoring is required for the subtidal geotechnical investigation works as currently proposed, if the proposed locations for geotechnical investigation targets change so that they come within 30m of anomalies or wreck sites as identified, then archaeological monitoring shall be required as detailed at conditions 13,14 and 15 above.

17. In accordance with statutory obligations under the National Monuments Act 1930-2004 all discoveries that are cultural in nature or potential, including those of wrecks, shall be reported to the National Monuments Service or National Museum of Ireland within 4 days. A protocol for such reporting shall be put in place to satisfy this statutory requirement.

18. During the course of the works the Licensee shall comply with all relevant Health & Safety legislation.

Licence Specific Conditions

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