

ENVIRONMENTAL IMPACT ASSESSMENT REPORT TECHNICAL REVIEW

FS007050 Greenlink Interconnector Foreshore Licence Application

MGE0778RP0005
Greenlink Interconnector
Foreshore Licence
Application
EIAR Technical Review
F01
23 July 2021

REPORT

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
A01	Draft for Client Review	[Redacted]	[Redacted]	[Redacted]	11/06/2021
F01	Final	[Redacted]	[Redacted]	[Redacted]	23/07/2021

Approval for issue	
[Redacted]	23 July 2021

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1 INTRODUCTION

1.1 Greenlink Interconnector Project

Greenlink Interconnector Limited (GIL) is proposing to develop an electricity interconnector cable (Greenlink) linking the existing electricity grids in Ireland and Great Britain. The interconnector will have a nominal capacity of 500 MW. There will be one converter station near the existing National Grid substation at Pembroke in Pembrokeshire (Wales) and one converter station near the existing EirGrid substation at Great Island in County Wexford (Ireland). These will be connected by underground cables (onshore) and subsea cables (offshore).

Greenlink is designated as a European Union Project of Common Interest (PCI), project number 1.9.1, under the provisions of European Union Regulation No. 347/2013 on guidelines for Trans-European Network for Energy (TEN-E Regulations) and has successfully applied for funding under the Connecting Europe Facility.

The landfall points for the submarine cables are Baginbun Beach, County Wexford and Freshwater West, Pembrokeshire. The overall length of the interconnector is approximately 159km of submarine cabling and approximately 7km and 23km of onshore cable in Wales and Ireland respectively. The proposed development for the purposes of this Foreshore Licence Application covers the Irish marine components of Greenlink from mean high-water springs (MHWS) at the Irish landfall at Baginbun Beach, Co. Wexford to the 12nm limit. The Foreshore Licence Application also includes works at the Campile Estuary component of Greenlink, where the onshore cable route crosses the foreshore at the River Campile.

On 1st August 2019 GIL submitted a foreshore licence application to the Minister of State at the then Department of Housing, Planning and Local Government (now the Department of Housing, Local Government and Heritage: DHLGH). The proposed development comprises the following:

- Two high voltage direct current (HVDC) electricity power cables;
- A smaller fibre-optic cable for control and communication purposes;
- All associated works required to install, test, commission and complete the aforementioned cables; and
- All associated works required to operate, maintain, repair and decommission the aforementioned cables, including five repair events over the 40 year lifetime of Greenlink.

1.2 Application Documents

GIL submitted the following documents as part of the application:

- Greenlink Marine Environmental Impact Assessment Report (EIAR)
 - Volume 1 – Non Technical Summary
 - Volume 2 – EIAR
 - Volume 3 – Appendices
 - Appendix A – Stakeholder Meetings
 - Appendix B – Competent Experts Table
 - Appendix C – Underwater Noise Assessment
 - Appendix D – Herring and Sandeel Assessment
 - Appendix E – Commercial Fisheries Assessment
 - Appendix F – Marine Archaeology
 - Appendix G – Cable Route Survey
 - Appendix H – Environmental Survey Report
 - Appendix I – Intertidal Habitat Survey Report
 - Appendix J – UXO Risk Assessment

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- Appendix K – Magnetic Fields and the Induced Voltages caused by the Greenlink HVDC Circuit
- Appendix L – Landfall Selection;
- Greenlink Marine Natura Impact Statement (NIS);
- Greenlink Foreshore Licence Application Form;
- Greenlink Marine Foreshore Licence Map;
- Foreshore Licence Application FS007050 Greenlink Response to Consultation Comments;
- Consolidated Prescribed Bodies Observations FS007050 Greenlink Interconnector Limited;
- Campile Estuary Foreshore Licence Map; and
- Greenlink Summary of Onshore and Offshore Environmental Effects to Accompany Welsh Marine Licence Application.

Following requests for further information to inform the appropriate assessment, the following documents were provided to DHLGH by GIL:

- Greenlink Response to Request for Further Information (December 2020).
- Greenlink Information to Inform 2nd Public Consultation (March 2021).

The above reports and documents were considered as part of this technical review.

1.3 EIA Legislation

The Irish Foreshore Act 1933 (as amended) require that prior to the commencement of any works or activities on State-owned foreshore a licence or lease must be obtained from the relevant Minister, in this case the Minister for Housing, Local Government and Heritage.

A Foreshore Licence Application must meet all legal requirements under the relevant European Union directives, including the obligations of the EIA Directive (2014/52/EU) and associated national regulations. Project proponents are required to provide sufficient information to enable the Competent Authority (CA) to undertake an EIA screening assessment to determine whether or not the proposed project (either alone or in-combination with other projects) is likely to have significant effects in aspects of the environment by virtue of its nature, size and location. Article 4 of the EIA Directive requires that projects listed under Annex I must always have an EIA while projects listed under Annex II shall be subject to an EIA if (i) determined on a case-by-case basis or (ii) they exceed certain thresholds set by each Member State.

Although interconnector cable projects are not listed under Annex I or Annex II of the Directive, the applicant has followed the EIA process for all project components and has submitted an EIAR in support of the Foreshore Licence Application.

RPS was commissioned by the Marine Planning, Policy and Development section at DHLGH to provide technical review in relation to the statutory assessment of the Greenlink Marine EIAR - Ireland, Screening for Appropriate Assessment and Natura Impact Statement (NIS) submitted by GIL in their application for a Foreshore Licence Application. This technical review report presents the findings of RPS's review and assessment of the Greenlink Marine EIAR – Ireland.

2 TECHNICAL REVIEW

2.1 Methodology

The purpose of this report is to:

- Review and assess the content, suitability and accuracy of the information presented in the Greenlink Marine EIAR – Ireland;
- Assess the scientific rigour of the assessments of potential interaction and impacts, including a determination as to whether conclusions are reasoned and justifiable;
- Consider the suitability and effectiveness of mitigation proposed to avoid, reduce or remedy potential impacts; and
- Assess compliance of the activities proposed for the Greenlink Interconnector, the EIAR and the supporting documents with the objectives and requirements of the EIA Directive and associated implementing national regulations.

This technical review and assessment of the EIAR has been undertaken with regard to the relevant legislation, guidance and departmental circulars.

2.2 Overview

The European Union *Guidance on the preparation of the Environmental Impact Assessment Report* (EU, 2017) provides guidance to project proponents on the information to be included in EIARs and acts as a guide to Competent Authorities in the review and evaluation of the EIARs. Specifically, the EU Guidance includes a review checklist that may be used by competent authorities when reviewing EIARs to assess the adequacy of the report to meet the requirements of the EIA Directive. The Review Checklist includes an examination, analysis and evaluation of the direct, indirect, secondary and cumulative effects of the proposed development on the following environmental aspects:

- population and human health,
- biodiversity,
- land, soil, water, air and climate,
- material assets,
- cultural heritage and
- the landscape;
- the interaction between the above listed aspects; and
- an examination, analysis and evaluation of the expected direct and indirect significant effects on the environment derived from the vulnerability of the proposed development to risks of major accidents or disasters, or both major accidents and disasters, that are relevant to that development.

RPS has undertaken a review and assessment of the Greenlink Marine EIAR – Ireland and supporting information in accordance with the review checklist which is included in **Appendix A** of this report.

For quick reference the review checklist questions are coded using the colour system outlined in **Table 2.1** below. Discussion on the assessment and conclusions are presented in **Section 4** below.

Table 2.1 Review Question Colour Code System

Review Question Colour	Relevant to Project (Yes/ No)	Assessment of Adequacy	KEL Action Required
Green	Yes	Adequately Addressed	No further information required
Yellow	Yes	Partially Addressed	Further information required
Red	Yes	Not Addressed	Further information required
Grey	No	-	-

2.3 Further Information Requests

The initial RPS review of the ‘Stage 1 – Appropriate Assessment Screening’ (provided in the NIS, Chapter 4) and associated documents determined that insufficient information had been provided to assess, in view of best scientific knowledge and in view of the conservation objectives of the European sites, whether the proposed interconnector cable activities, individually or in combination with other plans or projects, is likely to have a significant effects on a European site, and further information was required to information the Screening for Appropriate Assessment (AA) determination, and subsequently the AA.

A Request for Further Information (RFI), in accordance with Regulation 42(3) of the European Communities (Birds and Habitats) Regulations 2011, as amended, was issued by the DHLGH to the applicant. The following further information was requested:

- Inclusion of the Keeragh Islands SPA and Saltee Islands SPA in the assessment for likely significant effects.
- An assessment of likely significant effect related to the identified pressure ‘hydrological changes (inshore/local)’ as a result of placement of external cable protection.
- Provision of additional information to support the conclusion that there would be no likely significant effects to migratory fish species viability, populations, or stocks, as a result of UXO detonation, specifically how aggregations of migratory fish would be avoided. It was also noted that the applicant, in their response to IFI, provided additional project specific mitigation not included in the NIS.
- Clarification regarding the exclusion of transboundary effects, i.e. likely significant effects to marine mammals from UK SACs.

After receiving a further information response from the applicant, RPS completed a Stage 1 Screening for AA on behalf of DHLGH. That assessment found that likely significant effects on European sites could not be ruled out and therefore a Stage 2 Appropriate Assessment should be undertaken. An initial evaluation by RPS of the NIS and associated documents indicated that an adverse effect on integrity of Hook Head SAC could not be avoided due to the installation of external cable protection at the HDD exit point within the SAC. Following a meeting between RPS, DHLGH and the applicant, this element of the project was redesigned, removing the potential for requiring external cable protection within Hook Head SAC.

As a result, this EIAR Technical Review has been amended to account for this redesign and reflects the final project design. Additional information received from the applicant on impacts to migratory fish species and marine mammals and resulting mitigation measures have also been incorporated. Removal of the requirement for external cable protection within Hook Head SAC removes the likelihood of hydrological changes (inshore/local) and therefore this potential effect has been screened out.

3 PUBLIC CONSULTATION

3.1 Background to Consultations

Public consultations were held by the applicant throughout 2018 and 2019 as detailed in Section 5.4.4 of the EIAR. Meetings were also held with Irish stakeholders to inform the Proposed Development and EIAR. These meetings are outlined in Volume 3, Appendix A of the Marine Environmental Impact Assessment Report – Ireland.

DHPLG (now DHLGH) held a period of statutory consultation following the submission of the Foreshore Licence Application, which commenced on 12th November 2019 and finished on 8th January 2020 (extended to 22nd January 2020 for some stakeholders). Following the RFI and subsequent further information submitted by GIL in support of their application, a second period of statutory consultation was held in April 2021. Observations received from the prescribed bodies and submissions from members of the public, and the applicant's responses to these are available to view on the [DHLGH website](#) and are summarised in the sections below where substantive comments were made.

3.2 First Public Consultation

DHPLG (now DHLGH) held a period of statutory consultation following the submission of the Foreshore Licence Application, which commenced on 12th November 2019 and finished on 8th January 2020 (extended to 22nd January 2020 for some stakeholders). Public notices concerning this Foreshore Licence Application were published in The Skipper, the Irish Independent, the New Ross Standard and the Wexford People. No public submissions were received during this initial period of consultation.

The Marine Institute, the Department of Agriculture, Fisheries and the Marine (DAFM), and the Department of Culture, Heritage and the Gaeltacht (DCHG) – Nature Conservation, the Marine Survey Office, Geological Survey of Ireland and the Water Marine Advisor of DHPLG (now DHLGH) had no objections to the proposed project. Where relevant, recommended conditions from the prescribed bodies have been included in **Section 4.3**. Following a response from the applicant, the Water Marine Advisor agreed to suggested amendments to two of their recommended conditions. These amended conditions have been included in **Section 4.3**.

3.2.1 Department of Culture, Heritage and the Gaeltacht (DCHG) – Underwater Archaeology Unit

The Underwater Archaeology Unit (UAU) provided substantive initial observations on 31st January 2020, these are summarised in the following sections.

3.2.1.1 Archaeological monitoring

The UAU requested that all works should be subject to detailed archaeological monitoring. The applicant responded to this request for monitoring by outlining that all surface works within the foreshore area will be avoided and that, therefore, archaeological monitoring would not be appropriate. The UAU responded on the 19th June 2020 confirming that if no surface works take place on the foreshore, then archaeological monitoring of this area is not required.

3.2.1.2 Offshore cable route anomalies

The UAU requested further detail regarding the characteristics and location of anomalies along the offshore cable route to inform UAU judgements on the Agreed Exclusion Zones (AEZ) proposed by the applicant. This included a recommendation that anomalies that cannot be excluded or attributed to an agreed AEZ, should be subject to underwater archaeological dive inspection.

The applicant responded by providing an addendum to the Greenlink Marine Archaeology Technical Report. This addendum provided further information on the 148 geophysical anomalies with archaeological potential. None of these anomalies were identified as wreck sites or having high archaeological potential. AEZs were defined for each individual anomaly based on the anomaly's particular characteristics, and that these AEZs were sufficient to mitigate any level of impact from the proposed development. The applicant stated that they did not believe that underwater archaeological dive inspections were necessary.

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In further correspondence on 19th June 2020, the UAU recommended that an AEZ of 50m should be put in place around all anomalies and if this was not possible that underwater archaeological dive inspection would be required. The UAU also requested confirmation be provided of these revised AEZs and if that was not possible, provision of a strategy for archaeological assessment of the anomalies should be submitted for consideration.

A meeting was held on 23rd September 2020 the outcome of which was that the applicant committed to implementing a 50m AEZ around the majority of the anomalies identified. It was agreed that three anomalies close to the proposed cable centreline will be investigated by archaeological dive to confirm whether or not they have archaeological potential. The UAU noted on 3rd November 2020 that based on the results of the dive inspection, further recommendations may be forthcoming.

The applicant committed to updating the Schedule of Mitigation issued to their contractor and will be tracked through the Construction Environmental Management Plan (CEMP). It was agreed that a condition will be included on the Foreshore Licence that commits the applicant to undertaking archaeological inspection of the three anomalies prior to construction works commencing.

3.2.2 Inland Fisheries Ireland

Inland Fisheries Ireland (IFI) raised two main observations on 5th March 2020. These observations and corresponding responses are summarised in the following sub-sections.

3.2.2.1 Geophysical survey work

IFI raised concerns regarding additional geophysical survey work 3-6 months ahead of installation, due to the potential for impacts to fish species from underwater noise. IFI initially requested that further geophysical surveying not be undertaken, and that route clearance as indicated by the applicant (pre-lay grapnel) be used to ensure no issues impeding the cable route.

The applicant responded to IFI outlining that the pre-construction geophysical route survey will be limited in extent, centring on the cable centreline and that the survey is required for additional reasons, including identifying any unexploded ordnance, confirming the seabed level and to inform micro-routing of the cable around mobile bedforms and sensitive habitats. Due to the time period between the previous geophysical survey and cable laying (3 years) there is the potential for sensitive habitat areas to have increased or appeared. For these reasons the applicant strongly requested that IFI's request does not become a condition of the foreshore licence. IFI responded on 9th September and confirmed that they were satisfied that additional surveys are required and requested that all mitigation measures outlined by the applicant in their response (see section 3.2.2.2 below) be implemented.

3.2.2.2 Impacts to twaite shad

In their initial observations, IFI highlighted the importance of the area of the proposed development for twaite shad, which is an Annex II species under the Habitats Directive and protected by Special Areas of Conservation nearby. IFI recommended that the timing of the works should take into consideration the relevant life cycle elements of the species, i.e. that directional drilling under the River Campile and all marine works of route clearing, rock armour placement and cable laying be undertaken outside the period April and May inclusive, in order to reduce any adverse impacts on the twaite shad.

The applicant responded, outlining why underwater sound pressures from horizontal directional drilling (HDD) under the Campile Estuary are unlikely to result in any disturbance to fish. The applicant recognised that UXO detonation has the potential to injure twaite shad and agree that as a precaution, UXO detonation between April and May (inclusive) should be avoided. The applicant proposed that the following Project Specific Mitigation be added to the Schedule of Mitigation of the EIAR:

- PS19 – UXO detonation will not be undertaken between April and May (inclusive) between KP145 and KP159.27.

On the 9th September 2020, IFI agreed to the proposed mitigation measure.

3.2.3 Sea Fisheries Protection Authority Eastern Region

The Sea Fisheries Protection Authority (SFPA) raised no objections to the proposed development, and provided three main observations on the application on 1st September 2020, firstly highlighting that the proposed development occurs within herring spawning grounds and that a number of commercially important fish species congregate close to the area and that the applicant is aware of the requirement to notify mariners and the SFPA office should a pollution event occur. The applicant made no comment to this observation.

Secondly, the SFPA highlighted the proximity to shellfish production areas and requested that no contaminants should be released during construction. The applicant responded agreeing with this observation and outlined their commitment to complying with all applicable statute and referred to embedded mitigation measures designed to manage pollution risks.

Thirdly, the SFPA recommended that the applicant liaises with the local inshore fisherman's forum, and Bord Iascaigh Mhara (BIM) prior to commencement of any works within the 6nm limit to allow for any protective measure regarding fishing gear and harvesting of shellfish. The applicant confirmed that extensive fisheries liaison, involving BIM, was carried out prior to application submission and will continue as the project progresses.

On the 4th November, the SFPA responded to the applicant recommending that a dedicated fisheries liaison be appointed for the proposed application and requested a list of fishing and aquaculture stakeholders contacted by the applicant. The applicant subsequently provided the SFPA with a list of stakeholders contacted and details of meetings and public exhibitions held.

3.3 Second Public Consultation

Following the second round of consultation in April 2021, submissions containing specific comments were received from BIM, the Environmental Protection Agency (EPA), Wexford County Council, Inland Fisheries Ireland (IFI), Sea Fisheries Protection Authority (SFPA), Underwater Archaeology Unit (UAU) and DAFM. The applicant responded to these in May 2021. These comments are outlined in the sub-sections below.

Three submissions from members of the public were received, and the applicant responded to these in May 2021. The content of the public submissions was considered for this technical review of the EIAR, however, did not alter the conclusions made.

3.3.1 Bord Iascaigh Mhara, Sea Fisheries Protection Authority and Department of Agriculture, Food and the Marine

BIM, SFPA and DAFM had no specific comments on the additional information provided by the applicant, however, BIM noted that Bannow Bay is a world class oyster producing area and that all care should be taken to avoid spillage of oils/fuel or any other chemical from operational equipment at all stages and that if there are any spills that appropriate actions are put in place and aquaculture licence holders are notified. BIM also stressed the importance of maintaining communication with local fishers during planning and construction, specifically around reassuring fishers directly regarding the stated intention to bury the cable in the seabed to minimise the snagging risk to fishers and asked GIL to set out the proposed procedure in the event that the cable becomes exposed and poses a snagging risk.

SFPA noted that the landfall site is close to the entrance of Bannow Bay classified shellfish water and the Campile crossing is inland of the Waterford Harbour classified production area, and that shellfish in these locations could be sensitive to increased sediments in the water. SFPA noted that provided the disturbed sediments are not contaminated, they should not have an impact on food safety. DAFM reiterated these comments.

In their response to BIM, GIL outlined engagement with the fishing community to date, and reiterate their commitments to maintaining communication in the Schedule of Mitigation through Notices to Mariners (Embedded Mitigation EM10) and the appointment of a Fisheries Liaison Officer during construction works (Embedded Mitigation EM25). GIL confirmed that all project vessels will comply with MARPOL Annex IV Prevention of Pollution from Ships standards and will have shipboard oil pollution emergency plans in place. GIL also confirmed that assurance can be provided to fishers that the intention is to bury the cable to minimise snagging risk to fishers and commits to consulting with fishery stakeholders once the final cable burial plan and method statements are provided by the contractor.

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GIL responded to SFPA reiterating that in sediment samples taken during the cable route survey, metal and hydrocarbon concentrations were generally low and therefore sediments to be disturbed are not contaminated.

3.3.2 Environmental Protection Agency

The EPA had no specific comments on the additional information provided by the applicant, but noted that in the EIAR, the applicant made no statement on the requirement for a Dumping at Sea Licence for aspects of the decommissioning phase.

GIL responded to the EPA's observation, stating that the least environmentally damaging option may be to leave the cable in-situ and that at this time there is no deliberate disposal proposed. The appropriate licences, permits and consents for decommissioning will be obtained at this time and will, where required include a further environmental impact assessment.

3.3.3 Wexford County Council

Wexford County Council had no specific comments on the additional information provided by the applicant but included comments from their observations to An Bord Pleanála on the onshore aspects of the development. These comments are not considered relevant to the marine EIA.

3.3.4 Inland Fisheries Ireland

IFI made no specific comments on the additional information provided by the applicant, but added the following further comments/questions:

- Once the cable-laying method has been agreed, request that relevant stakeholders are notified, including IFI's Environmental Officer.
- The use of soft-start and ramp-up procedures for any sound-generating works, both on a day-to-day basis and on restart after any stoppages, and that this should be a condition of the Foreshore Licence.
- IFI request that if any UXO detonation is required that the local Environmental Officer be notified, so that they can take it into account when assessing the migration success of the diadromous fish species in the area.
- Regarding electromagnetic field (EMF) effects, IFI asked whether monitoring of effects to key shark species from changes in magnetic fields around the HDD exit points was planned.

GIL confirmed that the IFI Environmental Officer will be included in stakeholder engagement as construction of the project progresses and will be notified in the event of a UXO detonation being planned. GIL reiterated that Embedded Mitigation EM19 and EM23 commits to the implementation of DAHG (2014) 'Guidance to Manage the Risk to Marine Mammals from Man-made sources in Irish Waters' for both geophysical surveys and UXO detonations. Although these guidelines are intended for the mitigation of underwater noise impacts to marine mammals, the soft-start/ramp-up procedures implemented are also applicable to fish.

With respect to potential EMF effects on key shark species, GIL reiterated the conclusions of EIAR Section 8.6.5.1, which stated that *"Calculations for the cables in the bundled and unbundled configuration estimate that the iE fields at 1m from the cables (i.e. on the seabed) are below the thresholds for attraction and avoidance. It is therefore concluded that it is very unlikely that there will be iE fields strong enough to result in an avoidance response from electroreceptive fish."* As a result, no significant impacts are predicted, and as such, no project specific mitigation or monitoring is proposed.

3.3.5 Underwater Archaeology Unit

UAU had no specific comments on the additional information provided by the applicant, but reiterated their position regarding offshore exclusion zones, archaeological monitoring and reporting and having a standby archaeological dive team. In summary:

- 50m AEZs to be placed around all identified anomalies. Final cable positions will adhere to these AEZs. Charts showing the location of all AEZs in relation to the cable route should be sent to the National

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Monuments Service 1 week prior to cable laying works commencing, and the applicant shall inform DHLGH in the event that route changes impinge on any of the AEZs.

- Archaeological monitoring by a suitably qualified underwater archaeologist will be required during all seabed disturbance works, including manhole works on landfall side, pre-lay grapnel run surveys, cable installation works, all cable laying works from the low water mark out to the 12-mile limit and post-lay inspection and burial works. This monitoring will be licensed under the National Monuments Act 1030-2004 and a licence should be obtained 2 weeks in advance of works taking place.
- Should archaeological material be found during the course of monitoring, the archaeologist shall have work in the area suspended, pending a decision as to how best to resolve the archaeology. The applicant shall be prepared to be advised by the DHLGH with regard to any mitigating action (e.g. avoidance, preservation in situ or excavation).
- An archaeological dive team should be retained on standby in the event that archaeological material is uncovered during the cable laying works. A dive licence should be in place by the dive team 2 weeks in advance of cable laying works commencing to prevent delays.
- The DHLGH shall be furnished with a report describing the results of the monitoring, any diving etc.

GIL responded to UAU, stating no objection in principle to UAU's points around AEZs and reiterated that they will take all practicable measures to avoid AEZs. GIL noted the requirement to furnish UAU with details of the AEZs 1 week prior to cable laying works and will consult UAU in a timely manner if there are any changes with respect to avoiding exclusion zones. GIL will commit to applying for an excavation licence and dive licence in a timely manner with the required application documentation.

4 DISCUSSION AND CONCLUSION

4.1 Discussion

The assessment of compliance of proposed Greenlink Interconnector project with the objectives and requirements of the EIA Directive and associated national regulations, took into account the following reports and supporting information that formed part of the Greenlink Interconnector Foreshore Licence Application package:

- EIAR and Appendices;
- EIAR Non-Technical Summary;
- Foreshore License Application Form; and,
- Natural Impact Statement.

The assessment also took into consideration written observations made by the prescribed bodies to DHLGH in relation to the Foreshore Licence Application and the following documents submitted by GIL in response to a Request for Further Information:

- Greenlink Response to Request for Further Information (December 2020);
- Greenlink Information to Inform 2nd Public Consultation (March 2021).

RPS's technical review has concluded that the submitted EIAR and associated documents and GIL's Response to Request for Further Information provide adequate information to inform the assessment of environmental impact.

4.2 Conclusion

Under the EIA Directive 2011, as amended by the EIA Directive 2014, Article 8(a) introduces a new provision regarding the information to be incorporated into a grant of development consent as follows:

- The reasoned conclusion of the competent authority on the significant effects on the environment;
- Any environmental conditions attached;
- A description of the features and measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment; and
- Monitoring measures, where appropriate.

RPS conducted an examination, analysis and evaluation of the information contained in the Greenlink Marine EIAR – Ireland and supporting documents, including observations of the prescribed bodies and documents submitted as further information. It is the opinion of RPS, that the Greenlink application documentation identified and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

RPS considers that the main significant direct and indirect effects of the proposed development are, and will be mitigated as follows:

- Cable burial has the potential to penetrate and/or disturbance of the substrate below the surface of the seabed, including abrasion and resulting effects on outcropping Annex I bedrock reef. These effects will be mitigated by establishing exclusion zones around Annex I bedrock reef features within Hook Head SAC. No intrusive works will be undertaken on Baginbun Beach between mean high-water springs and the low water mark.
- Within Hook Head SAC, the installation of external cable protection over the HDD exit location would lead to physical change of the Annex I habitat large shallow inlets and bays. As a result, the project has been redesigned to ensure that no external cable protection will be deposited on the seabed surface at the HDD location.
- There is potential for effects to the Dunmore East Herring Spawning Area from penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion as a result of cable trenching, and physical change of the seabed as a result of external cable protection. These potential

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impacts will be mitigated by avoiding intrusive works within the spawning area during the peak spawning period (October to January).

- There is potential for underwater noise changes as a result of geophysical survey and UXO detonation to result in physical injury and disturbance to marine mammals. The applicant will adhere to DAHG (2014) mitigation procedures for geophysical survey, namely implementation of a pre-start watch and soft-start/ramp-up procedure. If UXO detonation is required, DAHG (2014) guidelines specific to Blasting will be followed. In addition, the following mitigation will be undertaken:
 - Passive acoustic monitoring (PAM) will be utilised during darkness and poor visibility to allow 24-hour monitoring for marine mammals.
 - An acoustic deterrent device (ADD) will be used prior to detonation to deter animals from entering the zone of influence. The ADD will be used for as short a period as necessary to minimise introduction of additional noise.
 - If a UXO is greater than 10kg a soft-start procedure will be used in combination with the ADDs.
 - Deflagration (low order detonation) will be undertaken on all UXO charge sizes.
 - A big bubble curtain (BBC) will be used for deflagration in water depths equal to or less than 40m.
- There is potential for underwater noise changes as a result of geophysical survey and UXO detonation to result in physical injury and disturbance to fish. In addition to the above mitigation for marine mammals, UXO detonation will not be undertaken between April and May (inclusive) between KP145 and KP159.29 to avoid the sensitive spawning period for twaite shad. Although the DAHG (2014) guidelines are specific to marine mammals, implementation of a soft-start/ramp-up procedure will also provide mitigation for fish.
- Impacts to all locations with archaeological potential will be avoided through the implementation of a 50m archaeological exclusion zone (AEZ).

4.3 Environmental Conditions

If the DHLGH are minded to grant a Foreshore Licence for the Greenlink Interconnector, the following conditions are recommended:

- 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.
- The Licensee shall complete the works in strict accordance with the particulars submitted in support of their application.
- The Licensee shall ensure that the mitigation measures set out in the updated Schedule of Mitigation in 'Greenlink Information to Inform 2nd Public Consultation' submitted by the applicant on 23rd March 2021 shall be implemented in full.
- Care should be taken to avoid spillage of oils/fuel or any other chemical from operational equipment at all stages and if there are any pollution events, Bord Iascaigh Mhara (BIM) and the Sea Fisheries Protection Authority are notified immediately.
- Works on the foreshore shall be certified by a suitable qualified Chartered Engineer stating that they conform to the relevant national/international Standard Specification or Codes of Practice. On completion of the works the said Chartered Engineer shall certify that the works have been completed in accordance with the plans and particulars lodged with the application.
- The Licensee shall notify the DHLGH at least 14 days in advance of the commencement of the works on the foreshore.
- No refuelling of equipment, machinery or plant shall take place on the foreshore. Also, no storage of machinery or plant shall take place on the foreshore.
- A detailed Construction Environmental Management Plan (CEMP), to include waste management measures, is to be submitted by the Licensee to DHLGH for approval in advance of works commencing.
- A detailed Environmental Management Plan (EMP), to include waste management measures, is to be submitted by the Licensee to DHLGH for approval in advance of works commencing.

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- All material/debris collected as a result of the proposed pre-lay grapnel run shall be disposed of on-shore to an appropriately authorised waste management facility in accordance with the appropriate waste legislation.
- The Licensee shall ensure that the target burial depth for the length of the nearshore (beach shallow and intertidal zones to LWM) foreshore shall be in accordance with those set out for HDD operations, while the target minimum depth for offshore burial shall be as set out in the application documents.
- The Licensee shall arrange the publication of a local marine notice giving general description of operations and approximate dates of commencement and completion.
- A cable burial plan will be submitted by the Licensee which outlines proposed method statements and cable protection measures for approval by DHLGH and discussion with fisheries stakeholders. This should include detail on sourcing of material for rock placement.
- Any crossings of in-situ and future cables or pipelines must be in accordance with the International Cable Protection Committee ICPC Recommendations (2014). A copy of all relevant cable crossing agreements reached within the foreshore domain shall be submitted to DHLGH within one month of any such agreement being reached.
- Within two months of completion of the works, the applicant shall submit an independently certified map/chart showing the 'as built' location of the subsea cable and the Campile River crossing, this map should include a route position list. Information on the burial depths and areas where rock placement was used to protect subsea cables shall be provided.
- In order for charts and nautical publications to be updated the Licensee shall inform the British Admiralty Hydrographic Office at Taunton, UK of the location and nature of the works.
- The Licensee shall at all times during the continuance of this Licence keep the said cable in a good and proper state of repair and condition and also ensure that it will not be injurious to navigation, the adjacent lands or the public interest.
- On completion of installation and maintenance/repair works the Licensee shall ensure that all equipment and materials are removed (except for cable protection deposits) and the foreshore is re-instated to its original condition to the satisfaction of the DHLGH.
- During the course of the nearshore works the Licensee shall ensure that where relevant:
 - all necessary precautions are put in place to protect the public in accordance with relevant Health and Safety Legislation;
 - existing public access arrangements to the general foreshore area are not impeded by any plant or materials used in connection with the works, and where relevant this access should be made safe and guaranteed by the provision of appropriate signage/notices/barriers etc. to the satisfaction of the DHLGH;
 - procedures are adopted to ensure that the works operations and any works associated therewith are not injurious to fishing, navigation, adjacent lands or the public interest.
- Archaeological Exclusion Zones (AEZs) of 50m will be applied to cover the locations with archaeological potential as outlined in the EIAR, Technical Appendix F, Table 4.
 - If the 50m AEZ at CA-2007, CA-2008 and CA-2009 cannot be avoided by the proposed installation works, these anomalies will be investigated through archaeological dive inspection to confirm or otherwise the archaeological potential. Based on the results of the dive inspection, the Underwater Archaeology Unit will be notified and further recommendations may be forthcoming.
 - When cable positions are finalised, they too will adhere to the 50m AEZs.
 - Charts showing the location of all AEZs should be forwarded to the National Monuments Service 1 week prior to the cable laying works commencing. The developer shall inform DHLGH in the event that route changes impinge on any of these AEZs.
- Archaeological monitoring, carried out by a suitably qualified underwater archaeologist, will be required to be carried out to monitor all proposed seabed disturbance works to take place as part of this development. This includes the pre-lay grapnel run surveys, cable installation works, all cable laying works from the low water mark out to the 12-mile limit and post-lay inspection and burial works.

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- An archaeological monitoring licence under the National Monuments Acts 1930 – 2004 shall be obtained 2 weeks in advance of any works taking place.
- A detailed method statement shall accompany the licence application and shall include details of the proposed works, duration of works; archaeological monitoring team proposed and a find's retrieval strategy.
- Monitoring of the main cable laying works should take place on board the main cable laying vessel.
- Should archaeological material be found during the course of monitoring, the archaeologist shall have the work in that area suspended, pending a decision as to how best to resolve the archaeology.
- The applicant shall be prepared to be advised by the DHLGH with regard to any necessary mitigating action (e.g. avoidance, preservation in situ or excavation). The applicant shall facilitate the archaeologist in recording any material found.
- An archaeological dive team should be retained on standby in the event that archaeological material is uncovered during the cable laying works.
 - A dive licence should be in place by the archaeological dive team 2 weeks in advance of the cable laying works commencing to prevent delays to potential archaeological diving work associated with the project.
- The DHLGH shall be furnished with a report describing the results of the monitoring, and any diving.

It is concluded that subject to the implementation of the mitigation measures proposed, as set out in the updated Schedule of Mitigation in 'Greenlink Information to Inform 2nd Public Consultation' and subject to compliance with the conditions set out herein, the proposed Greenlink Interconnector will not result in significant adverse effects on the environment.

It is noted that formal determination on the EIA is required will be made by the Minister for the DHLGH. This determination will not be prejudiced by this review.

Appendix A

EIAR Review Checklist

A.1 Description of the Project

The Objectives and Physical Characteristics of the Project

No	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.1	Are the Project's objectives and the need for the Project explained?	Yes	<p>Yes, adequately addressed.</p> <p>The application was submitted on 1st August 2019, seeking foreshore consent for the installation of a subsea and underground electricity interconnector cable between the existing electricity grids in the Republic of Ireland and Great Britain with a nominal capacity of 500 megawatts.</p> <p>The need for the project is outlined in Chapter 3 'Development of the Project and Alternatives' of the EIAR.</p>	No
1.2	Is the programme for the Project's implementation described, detailing the estimated length of time (e.g. expected start and finish dates) for construction, operation, and decommissioning? (this should include any phases of different activity within the main phases of the Project, extraction phases for mining operations for example)	Yes	<p>Yes, adequately addressed.</p> <p>An indicative programme for construction is provided in Section 4.5 of the EIAR. The project is expected to be fully operational within 36 months of construction beginning. Landfall preparations are due to begin before marine cable laying can be completed.</p> <p>The operational phase of the cable is due to span 40 years, further detail is provided in Section 4.10 of the EIAR.</p> <p>Decommissioning extent is discussed in Section 4.13.5 of the EIAR, exact details are not yet known, however, it is expected to be similar to the timescale of the construction phase.</p>	No
1.3	Have all of the Project's main characteristics been described?	Yes	<p>Yes, adequately addressed.</p> <p>The main characteristics of the project have been described as follows:</p> <ul style="list-style-type: none"> • Descriptions of pre-installation works (geophysical survey and route preparation including unexploded ordnance clearance) are provided in Section 4.6 'Pre-installation works'. • Cable installation works (including vessels, cable laying, burial and protection methods) and landfall installation works are described in Sections 4.7 'Cable installation' and 4.8 'Landfall installation' • Cable operation, including survey and repair works are described in Section 4.10 'Cable operation'. • Decommissioning options are described in Section 4.13 'Decommissioning'. 	No

1.4	Has the location of each Project component been identified, using maps, plans, and diagrams as necessary?	Yes	<p>Yes, adequately addressed.</p> <p>The locations of the relevant project components are outlined in:</p> <ul style="list-style-type: none"> • EIAR Section 1.1: The Proposed Development • EIAR Figure 1-3 'Proposed Development ROI Waters' - Drawing No. P1975-CORR-002 • Foreshore License Application Form: Foreshore Licence Map – Greenlink Marine - Drawing No. P1975-CORR-03 	No
1.5	Is the layout of the site (or sites) occupied by the Project described? (including ground levels, buildings, other physical structures, underground works, coastal works, storage facilities, water features, planting, access corridors, boundaries)	Yes	<p>Yes, adequately addressed.</p> <p>See response to Question 1.4.</p>	No
1.6	For linear Projects, have the route corridor, the vertical, and horizontal alignment and any tunnelling and earthworks been described?	Yes	<p>Yes, adequately addressed.</p> <p>The route corridor selection is described in the EIAR Section 3.5 'Offshore Route Selection'.</p> <p>Cable laying and burial methods are described in the EIAR Section 4.7 'Cable installation'</p>	No
1.7	Have the activities involved in the construction of the Project (including land-use requirements) all been described?	Yes	<p>Yes, adequately addressed.</p> <p>Activities involved in construction are described in Section 4.6 'Pre-installation works' and Section 4.7 'Cable installation' of the EIAR.</p>	No
1.8	Have the activities involved in the Project's operation (including land-use requirements and demolition works) all been described?	Yes	<p>Yes, adequately addressed.</p> <p>Activities involved during operational phase of the projects are addressed in the EIAR Section 4.10 'Cable Operation'.</p>	No
1.9	Have the activities involved in decommissioning the Project all been described? (e.g. closure, dismantling, demolition, clearance, site restoration, site re-use, etc.)	Yes	<p>Yes, adequately addressed.</p> <p>Potential activities involved in decommissioning of the cable are discussed in the EIAR Section 4.13 'Decommissioning'. These include retrieval of buried cable, disposal and re-use of components. It is proposed that mattresses and external cable protection are to be left in situ. A waste management protocol will be drafted at the time of decommissioning.</p>	No
1.10	Have any additional services, required for the Project, been described? (e.g. transport access, water, sewerage, waste disposal, electricity, telecoms)	n/a	n/a	n/a

1.11	Are any developments likely to occur as a consequence of the Project identified? (e.g. new housing, roads, water or sewerage infrastructure, aggregate extraction)	n/a	n/a	n/a
1.12	Have any existing activities that will alter or cease as a consequence of the Project been identified?	Yes	<p>Yes, adequately addressed.</p> <p>Table 14-6 in the EIAR states that recreational activities in the area of the beach will need to stop during installation works.</p> <p>A 1km wide x 12km long exclusion zone will be included around the cable centreline, commercial shipping, recreational boating and fishing vessels will be unable to enter the area of works.</p>	No
1.13	Have any other existing or planned developments, with which the Project could have cumulative effects, been identified?	Yes	<p>Yes, adequately addressed.</p> <p>The potential for cumulative effects, including transboundary effects, associated with the project is considered in the EIAR Chapter 16 – ‘Cumulative Effects Assessment (CEA)’.</p>	No
1.14	Has the ‘whole Project’ been described, e.g. including all associated/ancillary works?	Yes	<p>Yes, adequately addressed.</p> <p>Chapter 4 of the EIAR gives a description of all aspects of the Ireland Marine element of the project. The development of the full interconnector route is described in Chapter 3.</p> <p>Section 1.1 of the Greenlink Foreshore Licence Application provides a description of proposed works/activity.</p>	No
1.15	Are any activities described as part of the ‘whole Project’ excluded from the assessment? Are such exclusions justified? (e.g. associated/ancillary activities can be included either because they fall under the scope of the Directive (Annex I or II) or because they can be considered as an integral part of the main infrastructure works using the ‘centre of gravity test’. Guidance on associated and ancillary works has been published by the European Commission in an Interpretation Line available here	Yes	<p>Yes, adequately addressed.</p> <p>The ‘whole project’ comprises onshore and offshore elements in both Ireland and Wales and separate EIARs have been submitted to the appropriate consenting authority for each element. The present assessment relates only to the elements relevant to consenting within the limits of the foreshore. No activities described as relating to the foreshore have been excluded from the assessment.</p>	No

The Size of the Project

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.16	Is the area of land occupied by each of the permanent Project components quantified and shown on a scaled map? (including any associated access arrangements, landscaping, and ancillary facilities)	Yes	<p>Yes, adequately addressed.</p> <p>The footprint of the proposed development (the cable corridor) is described and illustrated in the following:</p> <ul style="list-style-type: none"> • EIAR Section 1.1: The Proposed Development • EIAR Figure 1-3 Proposed Development ROI Waters - Drawing No. P1975-CORR-002 Foreshore Licence Application Form • Foreshore Licence Map – Greenlink Marine - Drawing No. P1975-CORR-03 <p>The length of the Greenlink marine cable is quantified in Section 4.2 of the EIAR while the width of the cable route is quantified in Section 4.3.</p> <p>Following the Request for Further Information and subsequent redesign of the HDD exit area, the applicant supplied updated figures illustrating the original and indicative HDD exit areas in the document 'Greenlink Information to Inform 2nd Public Consultation'. These figures supersede Figure 4-19 (Drawing P1975-INST-002) of the EIAR.</p>	No
1.17	Has the area of land required temporarily for construction been quantified and mapped?	n/a	n/a	n/a
1.18	Is the reinstatement and after-use of the land occupied temporarily for the operation of the Project described? (e.g. land used for mining or quarrying)	n/a	n/a	n/a
1.19	Has the size of any structures or other works developed as part of the Project been identified? (e.g. the floor area and height of buildings, the size of excavations, the area or height of planting, the height of structures such as embankments, bridges or chimneys, the flow or depth of water)	n/a	n/a	n/a
1.20	Has the form and appearance of any structures or other works developed as part of the Project been described? (e.g. the type, finish, and colour of materials, the architectural design of buildings and structures, plant species, ground surfaces, etc.)	n/a	n/a	n/a

1.21	For urban or similar development Projects, have the numbers and other characteristics of new populations or business communities been described?	n/a	n/a	n/a
1.22	For Projects involving the displacement of people or businesses, have the numbers and other characteristics of those displaced been described?	Yes	Yes, adequately addressed. Table 14-6 in the EIAR states that recreational activities in the area of the beach will need to stop during installation works. A 1km wide x 12km long exclusion zone will be included around the cable centreline, commercial shipping, recreational boating and fishing vessels will be unable to enter the area of works.	No
1.23	For new transport infrastructure or Projects that generate substantial traffic flows, has the type, volume, temporal pattern, and geographical distribution of new traffic generated or diverted as a consequence of the Project been described?	n/a	n/a	n/a

Production Processes and Resources Used

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.24	Have all of the processes involved in operating the Project been described? (e.g. manufacturing or engineering processes, primary raw material production, agricultural or forestry production methods, extraction processes)	n/a	n/a	n/a
1.25	Have the types and quantities of outputs produced by the Project been described? (these could be primary or manufactured products, goods such as power or water or services such as homes, transport, retailing, recreation, education, municipal services (water, waste, etc.)	Yes	Yes, adequately addressed. Section 1.1 of the EIAR describes the type of output (i.e. power) produced by the project. Each cable will operate at a voltage of 320kV as described in Section 4.4 of the EIAR. The cable link capacity is 500MW as described in Section 4.11.2.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.26	Have the types and quantities of resources, e.g. natural resources (including water, land, soil, and biodiversity), raw materials, and energy needed for construction and operation been discussed?	Yes	Partially addressed. Cable protection measures such as rock placement and concrete matting are discussed in Sections 4.7.4 for cable crossings and 4.7.5 for cable burial and protection. Quantities are not discussed; however, the footprint of cable protection required for cable crossings is outlined in Table 4-3 and lengths of cable protection required for the cable itself are outlined in Table 4-4. Cable protection at the HDD exit points, including details of the proposed footprint, is discussed in Section 4.8.1.3, however, following the Request for Further Information, the applicant has redesigned the HDD exit point, removing the potential requirement for cable protection at the exit point.	No
1.27	Have the environmental implications of the sourcing of resources, e.g. natural resources (including water, land, soil and biodiversity), raw materials, and energy been discussed?	Yes	Yes, adequately addressed. Environmental implications of the sourcing of the natural resources required for cable protection have not been described, however, embedded mitigation measure EM24 commits to a cable burial plan, which will outline proposed method statements and cable protection measures for approval.	No
1.28	Have efficiency and sustainability in use of resources, e.g. natural resources (including water, land, soil and biodiversity), raw materials, and energy been discussed?	n/a	n/a	n/a
1.29	Have any hazardous materials used, stored, handled or produced by the Project been identified and quantified? <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	n/a	n/a	n/a
1.30	Has the transportation of resources, including natural resources (including water, land, soil, and biodiversity) and raw materials to the Project site, and the number of traffic movements involved, been discussed? (including road, rail and sea transport) <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	Yes	Yes, adequately addressed. Section 4.7.1 outlines the different vessels required for the project. Section 4.7.1.5 describes a separate 'rock placement vessel' to the main cable laying vessel, which is to be used to transport and deposit external protection material e.g. rock berms. The number of vessel movements have not been outlined, however, given the scale of the project this is unlikely to be significant in the context of existing vessel traffic in the area.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.31	<p>Have the Project's environmentally relevant social and socio-economic implications been discussed? Will employment be created or lost as a result of the Project, for instance?</p> <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	Yes	<p>Yes, adequately addressed.</p> <p>All pressures related to the population and human health were screened out from assessment, Table 5-2 of the EIAR details the reasons for its exclusion.</p> <p>Table 14-6 states that recreational activities in the area of the beach will need to stop during installation works, this will be temporary.</p> <p>A 1km wide x 12km long exclusion zone will be included around the cable centreline, commercial shipping, recreational boating and fishing vessels will be unable to enter the area of works during the construction phase.</p>	n/a
1.32	<p>Have the access arrangements and the number of traffic movements involved in bringing workers and visitors to the Project been estimated?</p> <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	n/a	n/a	n/a
1.33	<p>Has the housing and provision of services for any temporary or permanent employees for the Project been discussed? (this is relevant for Projects that require the migration of a substantial, new workforce into the area, either for construction or in the long term)</p>	n/a	n/a	n/a

Residues and Emissions

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.34	<p>Have the types and quantities of solid waste generated by the Project been identified?</p> <p>(including the construction or demolition of wastes, surplus spoil, process wastes, by-products, surplus or reject products, hazardous wastes, household or commercial wastes, agricultural or forestry wastes, site clean-up wastes, mining wastes, decommissioning wastes)</p>	Yes	<p>Yes, adequately addressed.</p> <p>Solid waste is most likely to be generated during the decommissioning stage of the project. Section 4.13.2 outlines the level of decommissioning proposed; mattresses and external cable protection will be left in-situ, while cables will either be removed or left in-situ. Section 4.13.4 of the EIAR states that wastes will be handled, stored and disposed of according to waste management legislation and environmental best practice. The applicant intends to draft a waste management protocol at the time of decommissioning.</p>	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	<ul style="list-style-type: none"> during construction; during operation; during decommissioning. 			
1.35	Have the composition and toxicity, or other hazards from all solid wastes produced by the Project, been discussed?	Yes	Yes, adequately addressed. Solid waste is only likely to be generated during the decommissioning phase of the project. See response to question 1.34.	No
1.36	Have the methods for collecting, storing, treating, transporting, and finally disposing of these solid wastes been described?	Yes	Yes, adequately addressed. Solid waste is only likely to be generated during the decommissioning phase of the project, and it is proposed that cable may be retrieved, while all other infrastructure is decommissioned in-situ. Methods for retrieval, storage, transport and disposal of buried cable are described in Section 4.13.3.	No
1.37	Have the locations for the final disposal of all solid wastes been discussed, in consideration with the Waste Management Plan(s) concerned?	Yes	Yes, adequately addressed. Section 4.13.4 of the EIAR states that wastes will be handled, stored and disposed of according to waste management legislation and environmental best practice. The applicant intends to draft a waste management protocol at the time of decommissioning.	No
1.38	Have the types and quantities of liquid effluents generated by the Project been identified? (including site drainage and run-off, process wastes, cooling water, treated effluents, sewage) <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	Yes	Impacts from accidental oil or chemical spills have been scoped out of the EIAR in Table 5.2 and not discussed further, therefore types and quantities of oils/chemicals used are not identified. Water quality impacts from discharge of wastewater/sewage from the vessels have also been scoped out of the EIAR, therefore types and quantities of wastewater/sewage are not identified.	No
1.39	Have the composition and toxicity or other hazards of all liquid effluents produced by the Project been discussed?	Yes	Yes, adequately addressed. See response to question 1.38, impacts from liquid effluents have been scoped out of the assessment, therefore composition and toxicity are not discussed.	No
1.40	Have the methods for collecting, storing, treating, transporting, and finally disposing of these liquid effluents been described?	Yes	Yes, adequately addressed. See response to question 1.38, impacts from liquid effluents have been scoped out of the assessment, therefore composition and toxicity are not discussed.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			Table 5-2 describes control measures and shipboard oil pollution emergency plans that will be in place, and states that the project will comply with MARPOL requirements. Table 5-2 also states that a Construction Environmental Management Plan (CEMP) and an Emergency Spill Response Plan will be developed.	
1.41	Have the locations for the final disposal of all liquid effluents been discussed?	Yes	See response to question 1.40.	No
1.42	Have the types and quantities of gaseous and particulate emissions generated by the Project identified? (including process emissions, fugitive emissions, emissions from combustion of fossil fuels in stationary and mobile plant, emissions from traffic, dust from materials handling, odours) <ul style="list-style-type: none"> during construction; during operation; during decommissioning. 	n/a	All pressures related to the EIA factor Air and Climate screened out from assessment, Table 5-2 of the EIAR details the reasons for its exclusion.	No
1.43	Have the composition and toxicity or other hazards of all of emissions to the air produced by the Project been discussed?	n/a	See response to question 1.42.	No
1.44	Have the methods for collecting, treating, and finally discharging these emissions to the air described?	n/a	See response to question 1.42.	No
1.45	Have the locations for discharge of all emissions to the air been identified and have the characteristics of the discharges been identified? (e.g. height of stack, velocity and temperature of release)	n/a	See response to question 1.42.	No
1.46	Have the methods for capturing, treating, and storing these emissions been described?	n/a	See response to question 1.42.	No
1.47	Have the locations for the storage of all emissions identified and the characteristics of the storage unit been identified? (e.g. type of storage unit, storing capacity, methods used)	n/a	See review question 1.42.	No
1.48	Has the potential for resource recovery from wastes and residues been discussed?	Yes	Yes, adequately addressed.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	(including re-use, recycling or energy recovery from solid waste and liquid effluents)		During the decommissioning phase, it is noted re-use or recycling will be carried out wherever possible. See Section 4.13.4 of the EIAR.	
1.49	Have any sources of noise, heat, light or electromagnetic radiation from the Project been identified and quantified? (Including equipment, processes, construction works, traffic, lighting, etc.)	Yes	Yes, adequately addressed. Electromagnetic fields, heat and noise are described in section 4.11 of the EIAR.	No
1.50	Have the methods for estimating the quantities and composition of all residues and the emissions identified and any difficulties discussed?	Yes	Yes, adequately addressed. Solid and liquid waste effluent are not addressed throughout the EIAR as impacts from these pressures were coped out in Table 5-2. Methodologies for noise modelling are described in Section 3.1.1.3 of Appendix C Modelling for electromagnetic radiation is described in Section 4.11.2 of the EIAR.	No
1.51	Have the uncertainty attached to estimates of residues and emissions been discussed?	Yes	Yes, adequately addressed. Uncertainty attached to estimates of residues and emissions are not specifically discussed, however, the envelope of effects assessed will encompass the 'worst-case' in order to address uncertainty and avoid underestimating effects. Worst-case zones of influence are discussed in Section 5.16.2 'Level of design detail for the EIA'.	No

Risks of Accidents and Hazards

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
1.52	Have any of the risks associated with the Project been discussed? <ul style="list-style-type: none"> risks from handling of hazardous materials; risks from spills fire, explosion; risks of traffic accidents; risks from breakdown or failure of processes or facilities; 	Yes	Yes, adequately addressed. A number of pressures were deemed non-significant and scoped out of further assessment in the EIAR. Table 5-2 lists the excluded pressures and provides rationale for their exclusion. Excluded pressures related to accidents and hazards are: <ul style="list-style-type: none"> Hydrocarbon and PAH contamination Risk of ship collisions Accidental anchoring on cable 	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	<ul style="list-style-type: none"> risks from exposure of the Project to natural disasters (earthquake, flood, landslide etc.). 		Risks from natural disasters are not discussed in the EIAR, however, given the nature of the proposed project, it is not considered that the project would be exposed to natural disasters.	
1.53	Have the measures to prevent and respond to accidents and abnormal events been described? (preventive measures, training, contingency plans, emergency plans, early-warning systems, etc.)	Yes	<p>Yes, adequately addressed.</p> <p>Table 5-2 states that all project vessels will have control measures and shipboard oil pollution emergency plans (SOPEP) in place and will adhere to MARPOL Annex I requirements. A Construction Environmental Management Plan (CEMP) and an Emergency Spill Response Plan will be developed and implemented for the installation phase. Drafts of these plans have not been provided.</p> <p>Table 5-2 states that risks of accidental anchoring and ship collisions will be managed through standard industry best practice methods such as informing sea users of impending works, traffic monitoring and if necessary, use of guard vessels.</p> <p>An emergency response plan has not been provided. It is noted a plan will be provided at a later stage.</p>	No
1.54	Is there a plan in place detailing the preparedness for an emergency (e.g. suggested as part of the EIA Report's Mitigation measures)?	Yes	<p>Yes, adequately addressed.</p> <p>The Schedule of Mitigation (Chapter 17) outlines that the following plans will be in place:</p> <ul style="list-style-type: none"> EM5: Control measures and shipboard oil pollution emergency plans (SOPEPs) will be in place and adhered to under MARPOL Annex I requirements for all project vessels. EM9: An Environmental Management Plan (EMP) and an Emergency Spill Response Plan will be developed and implemented for the installation phase. 	No
1.55	Is this plan in line with other EU legislation requirements, in particular Article 12 of the Seveso Directive (Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances) which refers to emergency plans?	n/a	<p>n/a</p> <p>Doesn't apply to marine environment.</p>	No

A.2 Descriptions of Environmental Factors likely to be affected by the Project

Baseline: Aspects of the Environment

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
2.1	Have the existing land uses on the land to be occupied by the Project and the surrounding area described and are any people living on or using the land been identified? (including residential, commercial, industrial, agricultural, recreational, and amenity land uses and any buildings, structures or other property)	Yes	<p>Yes, adequately addressed.</p> <p>Land use affected is described in the “Existing Baseline” section of several chapters:</p> <ul style="list-style-type: none"> • Commercial Fisheries Section 12.4 • Shipping and Navigation Section 13.3 • Offshore Infrastructure and Other Marine Users 14.3 	No
2.2	Have the topography, geology and soils of the land to be occupied by the Project and the surrounding area been described?	Yes	<p>Yes, adequately addressed.</p> <ul style="list-style-type: none"> • Section 6.3 of the EIAR discusses the existing baseline of the physical environment. • Section 6.3.2 describes coastal processes, including geology at the landfall location. • Section 6.3.3 describes bathymetry, geology, seabed sediments and features of the marine element of the project. 	No
2.3	Have any significant features of the topography or geology of the area described and are the conditions and use of soils been described? (including soil quality stability and erosion, agricultural use and agricultural land quality)	Yes	<p>Yes, adequately addressed.</p> <p>Seabed features found within the foreshore region are described in Section 6.3.3 of the EIAR and displayed in Figures 6-7, 6-8 and 6-9 (Drawing P1975-SURV-005 to -007).</p> <p>Sediment quality is described in Section 6.3.4 of the EIAR.</p>	No
2.4	Has the biodiversity of the land/sea to be affected by the Project and the surrounding area been described and illustrated on appropriate maps?	Yes	<p>Yes, adequately addressed.</p> <p>Biodiversity to be affected is described in the ‘Existing Baseline’ section of several chapters:</p> <ul style="list-style-type: none"> • Benthic and Intertidal Ecology Section 7.3 • Fish and Shellfish Section 8.3 • Birds Section 9.3 • Marine Mammals and Reptiles Section 10.3. <p>Seabed sediments and features are illustrated in Figures 6-6 to 6-9.</p>	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<p>Benthic habitats are illustrated in Figures 7-5 to 7-1, while Annex I habitats are shown in Figures 7-15 and 7-16.</p> <p>Fish spawning and nursery areas are illustrated in Figures 8-1 and 8-2. Significant species sightings are displayed in Figures 8-3, 8-4, 9-1 and 10-1 to 10-7.</p>	
2.5	Have the species (including their populations and habitats), and the habitat types that may be affected by the Project been described? (Particular attention should be paid to any species and habitats protected under the Habitats and Birds Directives (Directives 92/43/EEC and 2009/147/EC).	Yes	<p>Yes, adequately addressed.</p> <p>See answer to Question 2.4 above.</p>	No
2.6	Have the Natura 2000 sites that may be affected by the Project been described?	Yes	<p>Yes, adequately addressed.</p> <p>Section 11.3 of the EIAR considers European sites that may be affected by the proposed project. Sixteen European sites were considered to be within the zone of influence of the project, and a pressure-receptor pathway was identified for thirteen of these sites.</p> <p>Table 11-2 in Section 11.3 of the EIAR provides some detail of the qualifying interests (species and habitats) for which the sites are designated. The NIS provides additional information on the designated sites within the zone of influence.</p>	No
2.7	Has the water environment of the area been described? (including reference to any River Basin Management Plans/Programme of Measures under the WFD, running and static surface waters, groundwaters, estuaries, coastal waters and the sea and including run off and drainage. N.B. not relevant if water environment will not be affected by the Project)	Yes	<p>Yes, adequately addressed.</p> <p>Section 6.3.1.1 of the EIAR addresses water levels and currents within the project area, Section 6.3.1.2 addresses waves and Section 6.3.1.4 addresses temperature and salinity in the project area.</p>	No
2.8	Has the hydrology, water quality, and use of any water resources that may be affected by the Project been described? (including any River Basin Management Plans/Programme of Measures under the WFD, use for water supply, fisheries, angling, bathing, amenity, navigation, effluent disposal)	Yes	<p>Yes, adequately addressed.</p> <p>Water quality is addressed in Section 6.3.4.1 of the EIAR.</p> <p>Use of water (sea) resources is described in the following chapters:</p> <ul style="list-style-type: none"> • 12. Commercial Fisheries • 13. Shipping and Navigation 	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<ul style="list-style-type: none"> 14. Offshore Infrastructure and Other Marine Users (including recreation such as angling, bathing and water sports). 	
2.9	Have local climatic and meteorological conditions in the area been described? (N.B. not relevant if the atmospheric environment will not be affected by the Project)	n/a	n/a	n/a
2.10	Has existing air quality in the area been described, including, where relevant, limit values set out by Directives 2008/50/EC and 2004/107/EC as well as relevant Programmes adopted under this legislation? (N.B. not relevant if the ambient air will not be affected by the Project)	Yes	<p>Yes, adequately addressed.</p> <p>This information is disclosed in Table 5.2 of the EIAR and is scoped out of any further assessment.</p>	No
2.11	Has the existing noise climate been described, including, where relevant, reference to noise maps and actions plans set out by the Environmental Noise Directive (2002/49/EU)? (N.B. not relevant if acoustic environment will not be affected by the Project)	n/a	Not relevant – although a potential effect of the project, underwater noise is considered under the receptors likely to be affected, i.e. marine mammals and fish.	n/a
2.12	Has the existing situation regarding light, heat, and electromagnetic radiation been described? (N.B. not relevant if these characteristics of the environment will not be affected by the Project)	Yes	<p>Yes – adequately addressed.</p> <p>The existing electromagnetic field is described in section 4.11.2.2 of the EIAR.</p> <p>Heat emissions were identified as a potential output of the project; however, as effects will be negligible, temperature changes were excluded from assessment, as outlined in Table 5-2. Therefore no description of the existing heat situation was made.</p> <p>Light emissions are not relevant to this project.</p>	No
2.13	Have any material assets in the area that may be affected by the Project been described? (including buildings, other structures, mineral resources, water resources)	Yes	<p>Yes, adequately addressed.</p> <p>Material assets that may be affected by the project are described in the following chapters:</p> <ul style="list-style-type: none"> Chapter 12 – Commercial Fisheries Chapter 13 – Shipping and Navigation Chapter 14 – Offshore Infrastructure and Other Marine Users. <p>Chapter 14 details telecommunication crossings with the proposed cable and the process of communication is detailed with the steps that need to be</p>	n/a

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<p>followed. One further application for foreshore licensing is currently taking place however it is not anticipated for there to be crossings with this project.</p> <p>A total of five crossings are expected with the current project.</p> <p>No aggregate dredging currently occurs in the Republic of Ireland. No military practice or licensed proposal sites are located within the proposed development.</p>	
2.14	Have any locations or features of archaeological, historic, architectural or other community or cultural importance in the area that may be affected by the Project been described, including any designated or protected sites?	Yes	<p>Yes, adequately addressed.</p> <p>Information on surveys and findings within the foreshore are located in Appendix F 'Marine Archaeology Technical Report' of the EIAR.</p>	No
2.15	Has the landscape or townscape of the area that may be affected by the Project been described, including any designated or protected landscapes and any important views or viewpoints?	Yes	<p>Yes, adequately addressed.</p> <p>Section 14.4 identifies visual disturbance as a potential pressure to recreational boating, bathers, surfers and other beach users. This will be a small-scale and temporary visual impact on the landscape/seascape.</p>	n/a
2.16	Have the demographic, social and socio-economic conditions (e.g. employment) in the area been described?	Yes	<p>Yes, adequately addressed.</p> <p>Section 12.4 of the EIAR outlines the existing baseline for commercial fisheries in the area of the proposed project, and more detail is provided in Appendix E 'Commercial Fisheries Technical Report'.</p> <p>Demographic and social conditions are not relevant due to the nature of the proposed project.</p>	No
2.17	Have any future changes in any of the above aspects of the environment that may occur in the absence of the Project been described? (the so-called Dynamic Baseline)	Yes	<p>Yes, adequately addressed.</p> <p>Natural evolution of the baseline is addressed in the following sections of the EIAR for each of the key topics;</p> <ul style="list-style-type: none"> • Section 6.3.5 - No change expected, • Section 7.3.6 - Sea temperature change impacting upon the populations of species in the area in the longer term • Section 8.3.8 - Sea temperature change impacting upon the populations of fish species in the area in the longer term • Section 9.3.4 - Bird species likely to increase and decrease depending on the prey population. Coastal processes could also increase pressure, this coupled with other climatic conditions which could lead to negative population trends. • Section 10.3.8 - Displacement due to temperature changes. 	n/a

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<ul style="list-style-type: none"> Section 13.3.3 - Traffic increase coupled with the unknown nature of Brexit. Section 14.3.7 - Due to policy there may be an increase in renewable energy development around the area of the proposed development in its lifetime. 	

Data Collection and Methods

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
2.18	Has the study area been defined widely enough to include all of the areas likely to be significantly affected by the Project?	Yes	<p>Yes, adequately addressed.</p> <p>The study area is described throughout the document, where appropriate and changes depending on the factors that are being assessed.</p>	No
2.19	Have all relevant national and local authorities been contacted to collect information on the Baseline environment?	Yes	<p>Yes, adequately addressed.</p> <p>Section 1.7 of the EIAR summarises consultation that takes place as part of the project. Further information is provided in chapter 5 of the EIAR, meetings and consultation information is provided and further details of meetings are located in Appendix A of the EIAR.</p>	No
2.20	Have all the sources of data and information from existing databases, free services, and other relevant environmental assessments been investigated?	Yes	<p>Yes, adequately addressed.</p> <p>Detail to describe the existing environment for each of the environmental topic chapters is sufficient.</p>	No
2.21	Have sources of data and information on the existing environment been adequately referenced?	Yes	<p>Yes, adequately addressed.</p> <p>Data sources are listed at the beginning of each environmental topic chapter in the EIAR (Chapters 6 – 15). Additional data sources/information referenced are compiled in the references section of these chapters.</p>	No
2.22	Is justification provided about which particular existing datasets was (were) were relied upon, as opposed to others?	Yes	<p>Yes, adequately addressed.</p> <p>In Appendix D 'Herring Spawning and Sandeel Assessment' justification is provided in Section 1.1.1 for using older data that that available.</p>	No
2.23	Where data collection has been undertaken to characterise the Baseline environment, have the methods used, any difficulties	Yes	<p>Yes, adequately addressed.</p> <p>Methods for data collection, difficulties encountered and uncertainties and within the data are described throughout the data source sections of the</p>	No

	encountered, and any uncertainties been the data described?		project (see review question 2.21). Specific details of the surveys and desk-based assessments undertaken are provided in Appendices C, D, E, F, G, H, and I.	
2.24	Were the methods used appropriate for the purpose?	Yes	Yes, adequately addressed. See response to review question 2.23.	No
2.25	Have the methods used to predict the impact of the Project on climate changes been described? (if relevant)	n/a	n/a	n/a
2.26	Have the methods used to predict climate change's impact on the Project been described?	n/a	n/a	n/a
2.27	Is the uncertainty attached to the climate change evolution predictions discussed? (if relevant)	n/a	n/a	n/a
2.28	Did you consider life cycle assessment of the Project to describe the Project's impact on climate change? (if relevant)	n/a	n/a	n/a
2.29	Have any important gaps in the data on the existing environment/ evolution prediction identified (e.g. climate change), and the means used to deal with these gaps during the assessment, been explained?	Yes	Yes, adequately addressed. No important gaps relevant to the project were identified.	No
2.30	Where data collection would be required to adequately characterise the Baseline environment, but they have not been practicable for any reason, are the reasons explained and have proposals been set out for the surveys to be undertaken at a later stage?	Yes	Yes, adequately addressed. Section 4.6.2 of the EIAR states that further geophysical surveying may be required prior to cable installation.	No

A.3 Description of the Likely Significant Effects of the Project

Scoping of Events

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.1	Has the process by which the scope of the information for the EIA Report defined been described? (for assistance, see the Scoping Guidance Document in this series)	Yes	Yes, adequately addressed. Section 5.4 of the EIAR discusses the approach to scoping and steps taken regarding consultation during the scoping stage	No
3.2	Is it evident that a systematic approach to Scoping has been adopted?	Yes	Yes, adequately addressed. Section 5.4 of the EIAR outlines the approach and steps taken as part of the scoping stage of the project.	No
3.3	Was consultation carried out during Scoping?	Yes	Yes, adequately addressed. Consultation was carried out with statutory, non-statutory and other interested parties to inform the scope of the EIAR and details are provided in Section 5.4 of the EIAR. Details of stakeholder meetings are provided in Appendix A of the EIAR.	No
3.4	Have the comments and views of consultees been presented?	Yes	Yes, adequately addressed. At the beginning of each topic chapter a table is provided listing scoping responses relevant to that topic and how they have been addressed. Meeting objectives and main results of meetings are detailed in Appendix A of the EIAR.	No

Prediction of Direct Effects

Note that in the EIAR no explicit distinction is made between direct, primary effects and indirect, secondary effects, however, it is considered that these types of effects have all be adequately addressed.

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.5	Have the direct, primary effects on land uses, people, and property been described and, where appropriate, quantified?	Yes	Yes, adequately addressed. See response to Question 3.9.	n/a
3.6	Have the direct, primary effects on geological features and characteristics of soils been described and, where appropriate, quantified?	n/a	Yes, adequately addressed. Potential effects on geology and sediments (soils) are outlined in Table 6-2 and these effects are quantified in the following sections: <ul style="list-style-type: none"> 6.6.2 Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion 6.6.4 Physical change (to another seabed type) 	No
3.7	Have the direct, primary effects on biodiversity been described and, where appropriate, quantified? (if relevant, are references made to Natura 2000 sites? (Directive 2009/147/EC and Directive 92/43/EEC)	Yes	Yes, adequately addressed. Potential effects on biodiversity are described separately for each of the receptor groups outlined in the answer to Question 2.4. <u>Benthic and Intertidal Ecology</u> Table 7-4 identifies the following potential effects, and these are quantified in Section 7.6: <ul style="list-style-type: none"> Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion Siltation rate changes, including smothering (depth of vertical sediment overburden) Physical change (to another seabed type) Electromagnetic changes <u>Fish and Shellfish</u> Table 8-3 identifies the following potential effects, and these are quantified in Section 8.6: <ul style="list-style-type: none"> Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion Physical change (to another seabed type) Underwater noise changes 	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<ul style="list-style-type: none"> Electromagnetic changes <p><u>Birds</u></p> <p>Table 9-6 identifies the following potential effect, and this effect is quantified in Section 9.6:</p> <ul style="list-style-type: none"> Visual disturbance <p><u>Marine Mammals and Reptiles</u></p> <p>Table 10-5 identifies the following potential effects, and these effects are quantified in Section 10.6:</p> <ul style="list-style-type: none"> Underwater noise changes – physical injury Underwater noise changes – disturbance Electromagnetic changes – impairment of navigation or orientation 	
3.8	Have the direct, primary effects on the hydrology and water quality of water features been described and, where appropriate, quantified?	Yes	<p>Partially addressed.</p> <p>The potential effects on the hydrology and water quality of water features are outlined in Table 6-2 and these effects are quantified in the following sections:</p> <p>6.6.2.4 Changes in suspended solids (water clarity)</p> <p>6.6.3 Water flow (tidal changes) local</p> <p>Following a Request for Further Information for the NIS, the applicant provided a more detailed assessment of the pressure 'hydrological changes (inshore/local) in 'Greenlink Response to Request for Further Information (December 2020) and following the redesign of the HDD exit point in March 2021, the pathway for this effect in the nearshore environment was removed entirely.</p>	No
3.9	Have the direct, primary effects on uses of the water environment been described and, where appropriate, quantified? (if relevant, are references made for River Basin Management Plans/Programmes of Measures under the WFD (2000/60/EC))	Yes	<p>Yes, adequately addressed.</p> <p>The potential effects on uses of the water environment are described separately for each of the receptor groups outlined in the answer to Question 2.8.</p> <p><u>Commercial Fisheries</u></p> <p>Table 12-3 identifies the following potential effects, and these effects are quantified in Section 12.7:</p>	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<ul style="list-style-type: none"> • Temporary displacement of fishing activity (including required static gear clearance)/Restricted access to fishing grounds • Temporary habitat disturbance affecting spawning, nursery or recruitment to stocks • Snagging resulting from obstruction on the seabed • Change in water depth • Electromagnetic changes – deviation of magnetic compasses • Electromagnetic changes – interference with inertial navigation <p><u>Shipping and Navigation</u></p> <p>Table 13-2 identifies the following potential effects, and these effects are quantified in Section 13.6:</p> <ul style="list-style-type: none"> • Displacement of vessels • Change in water depth • Electromagnetic changes – deviation of magnetic compasses • Electromagnetic changes – interference with inertial navigation <p><u>Offshore Infrastructure and Other Marine Users</u></p> <p>Table 14-4 identifies the following potential effects, and these effects are quantified in Section 14.6:</p> <ul style="list-style-type: none"> • Displacement of vessels • Visual disturbance • Restricted access on the beach • Change in water depth • Electromagnetic changes – deviation of magnetic compasses • Electromagnetic changes – interference with inertial navigation • Restricted development options. 	
3.10	Have the direct, primary effects on air quality been described and, where appropriate, quantified? (if relevant, are references made to Air Quality Plans under Directives 2008/50/EC and 2004/107/EC))	n/a	Air quality has been screened out of the assessment, see Table 5-2 of EIAR.	n/a

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.11	Have the direct, primary effects on climate change been described and, where appropriate, quantified?	n/a	Climate change has been screened out of the assessment, see Table 5-2 of EIAR.	n/a
3.12	Have the direct, primary effects on the acoustic environment (noise or vibration) been described and, where appropriate, quantified? (if relevant, are references made to Action Plans/Programme under the Environmental Noise Directive (2002/49/EU))	n/a	Although a potential effect of the project, underwater noise is considered under the receptors likely to be affected, i.e. marine mammals and fish.	No
3.13	Have the direct, primary effects on heat, light or electromagnetic radiation been described and, where appropriate, quantified?	Yes	<p>Yes, adequately addressed.</p> <p>Although effects on heat were excluded from the assessment, heat emissions from the cable are quantified in Section 4.12.1 of the EIAR.</p> <p>Light emissions are not relevant to this project.</p> <p>The electromagnetic field (EMF) produced by the cable is described and quantified in Section 4.11.2.3 of the EIAR. Further information on the project's EMF is provided in Appendix K.</p>	No.
3.14	Have the direct, primary effects on material assets and depletion of natural resources (e.g. fossil fuels, minerals) been described?	Yes	<p>Yes, adequately addressed.</p> <p>Effects on material assets are described separately for each of the receptor groups outlined in the answer to Question 2.13. These effects are:</p> <p><u>Chapter 12 – Commercial Fisheries</u></p> <ul style="list-style-type: none"> • Temporary displacement of fishing activity (including required static gear clearance)/Restricted access to fishing grounds • Temporary habitat disturbance affecting spawning, nursery or recruitment to stocks • Changes in suspended sediments (water clarity) indirectly leading to effects on commercially targeted species • Snagging resulting from obstruction on the seabed • Change in water depth • Electromagnetic changes – deviation of magnetic compasses • Electromagnetic changes – interference with inertial navigation <p><u>Chapter 13 – Shipping and Navigation</u></p> <ul style="list-style-type: none"> • Displacement of vessels • Change in water depth • Electromagnetic changes – deviation of magnetic compasses 	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			<ul style="list-style-type: none"> Electromagnetic changes – interference with inertial navigation <p><u>Chapter 14 – Offshore Infrastructure and Other Marine Users.</u></p> <ul style="list-style-type: none"> Displacement of vessels Visual disturbance Restricted access on the beach Change in water depth Electromagnetic changes – deviation of magnetic compasses Electromagnetic changes – interference with inertial navigation Restricted development options. <p>Effects on natural resources are not expected as a result of the project.</p>	
3.15	Have the direct, primary effects on locations or features of cultural importance been described?	Yes	<p>Yes, adequately addressed.</p> <p>Direct effects on marine archaeology are described in Table 15-3 as follows:</p> <ul style="list-style-type: none"> Direct damage to wrecks and obstructions, and archaeological sites 	No
3.16	Have the direct, primary effects on the quality of the landscape and on views and viewpoints been described and, where appropriate, illustrated?	Yes	<p>Yes, adequately addressed.</p> <p>Section 14.6.3 describes visual disturbance as a potential pressure to recreational boating, bathers, surfers and other beach users.</p>	No
3.17	Have the direct, primary effects on environmentally relevant demography, social, and socio-economic condition in the area been described and, where appropriate, quantified?	Yes	<p>Yes, adequately addressed.</p> <p>See response to Question 3.9 regarding direct, primary effects on commercial fisheries.</p> <p>Demographic and social conditions are not relevant due to the nature of the proposed project.</p>	
3.18	Have the secondary effects on any of the environment's aspects, above, caused by primary effects on other aspects been described and, where appropriate, quantified? (e.g. effects on biodiversity, including species and habitats protected under Directives 92/43/EEC and 2009/147/EC caused by soil, air or water pollution or noise; effects on uses of water caused by changes in hydrology or water	Yes	<p>Yes, adequately addressed.</p> <p>In the EIAR no clear distinction is made between direct, primary effects and indirect, secondary effects, therefore, for the purposes of this assessment it has been assumed that effects are direct, primary effects unless otherwise specified. The following indirect effects are described in the EIAR:</p> <p><u>12.7.5 Commercial Fisheries</u></p> <ul style="list-style-type: none"> Changes in suspended sediments (water clarity) indirectly leading to effects on commercially targeted species 	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	quality; effects on archaeological remains caused by desiccation of soils)		<p><u>15.6.3 Marine Archaeology</u></p> <ul style="list-style-type: none"> Indirect damage to wrecks and obstructions, and archaeological sites – caused by potential scour and plume effects resulting in increased protection to, or deterioration of, assets in the vicinity. 	
3.19	Have the temporary, short term effects caused only during construction or during time limited phases of Project operation or decommissioning been described? (e.g. emissions produced during the construction)	Yes	<p>Yes, adequately addressed.</p> <p>Temporary effects are defined in the EIAR as those lasting less than a year, while short-term effects are defined as lasting 1-7 years (Table 5-8).</p> <p>Throughout the EIAR, effects are described according to the project phase in which they occur, i.e. installation, operation, decommissioning and whether the effect is temporary, short-term or permanent.</p>	No
3.20	Have the permanent effects on the environment caused by construction, operation or decommissioning of the Project been described?	Yes	<p>Yes, adequately addressed.</p> <p>Throughout the EIAR, effects are described according to the project phase in which they occur, i.e. installation, operation, decommissioning and whether the effect is temporary, short-term or permanent.</p>	
3.21	Have the long-term effects on the environment, caused over the lifetime of Project operations or caused by build-up of pollutants, in the environment been described?	n/a	n/a	n/a
3.22	Have the effects that could result from accidents, abnormal events or exposure of the Project to natural or man-made disasters been described and, where appropriate, quantified?	n/a	Accidents and disasters have been scoped out of the assessment. See responses to questions 1.52 to 1.55.	No
3.23	Have the effects on the environment, caused by activities ancillary to the main Project, been described? (ancillary activities are part of the Project but usually take place at a distance from the main Project location e.g. construction of access routes and infrastructure, traffic movements, sourcing of aggregates or other raw materials, generation and supply of power, disposal of effluents or wastes). For further guidance and explanation concerning ancillary works assessment see http://ec.europa.eu/environment/eia/pdf/Note%20-	Yes	<p>Yes, adequately addressed.</p> <p>Environmental implications of the sourcing of the natural resources required for cable protection have not been described, however, embedded mitigation measure EM24 commits to a cable burial plan, which will outline proposed method statements and cable protection measures for approval.</p>	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	%20Interpretation%20of%20Directive%2085-337-EEC.pdf			
3.24	Have the indirect effects on the environment caused by consequential development been described? (consequential development is other Projects, not part of the main Project, stimulated to take place by implementation of the Project e.g. to provide new goods or services needed for the Project, to house new populations or businesses stimulated by the Project)	n/a	n/a No consequential development is anticipated as a result of the project.	
3.25	Have the cumulative effects on the environment of the Project, together with other existing or planned developments in the locality, been described? (different future scenarios including a worst-case scenario should be described, as well as the effects on both climate change and biodiversity). For further guidance on the assessment of cumulative impacts see http://europa.eu/environment/eia/eia-support http://ec.europa.eu/environment/archives/eia/eia-studies-and-reports/pdf/guidel.pdf .	Yes	Yes, adequately addressed. Chapter 16 of the EIAR is a Cumulative Effects Assessment which addresses intra-project effects (including cumulation of effects from activities in the other components of Greenlink) and inter-project effects.	No
3.26	Have the transboundary effects on the environment of the Project, either during construction or operation, been described?	Yes	Yes, adequately addressed. Section 16.4 of the EIAR addresses transboundary effects.	No
3.27	Have the geographic extent, duration, frequency, reversibility, and probability of occurrence of each effect been identified as being appropriate?	Yes	Yes, adequately addressed. Parameters for characterisation of effects are set out in Chapter 5. These parameters are scale, spatial extent, duration and frequency and in turn define the magnitude of the effect. Parameters for characterisation of receptors are also set out in Chapter 5; sensitivity, recoverability and importance. These in turn define the 'Receptors Value'. These parameters and definitions form the basis for the discussion of effects within each topic chapter.	

Prediction of Effects on Human Health and Sustainable Development Issues

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.28	Have the primary and secondary effects on human health and welfare described and, where appropriate, been quantified? (e.g. health effects caused by the release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the Project, changes in living conditions, effects on vulnerable groups).	n/a	n/a The EIA factor 'Population and human health' is excluded from the EIAR in Table 5-2. Adverse effects on human health are not considered likely.	n/a
3.29	Have the impacts on issues such as biodiversity, marine environment, global climate change, use of natural resources and disaster risk been discussed, where appropriate?	Yes	Yes, adequately addressed. Biodiversity is assessed in Chapters 7, 8, 9, 10 and 11 of the EIAR. Due to the nature of the project impacts on the marine environment are assessed throughout the EIAR. Climate change, use of natural resources and disaster risk have been scoped out of the EIAR.	No

Evaluation of the Significance of Effects

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.30	Is the significance or importance of each predicted effect clearly explained with reference to legal or policy requirements, other standards, and the number, importance, and sensitivity of people, resources or other receptors affected?	Yes	Yes, adequately addressed The significance of each effect is assessed using a significance matrix adapted from the EPA guidance document 'Revised Guidelines on the Information to be Contained in Environmental Impact Statements, Draft August 2017'. Definitions of significance levels from the EPA (2017) guidance are also used. Where available, relevant guidance documents have been used to provide thresholds against which to evaluate significance of specific effects. The significance of each predicted effect is described in its relevant chapter in sections 6.6, 7.6, 8.6, 9.6, 11.6, 12.7, 13.6, 14.6 and 15.6 of the EIAR. Significance of cumulative effects is considered within section 16.3.11.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			Impact assessment summaries are provided in the tables within the chapters above. These tables notify of the project phase the effect would occur in, embedded mitigation for the effect, the potential pressure, the magnitude of the effect, the sensitivity of the effect, the significance of the effect, the magnitude of residual effects, the sensitivity of residual effects, the significance of the residual effect and the project specific mitigation.	
3.31	Where effects are evaluated against legal standards or requirements, have the appropriate local, national or international standards been used and has relevant guidance followed?	n/a	Not relevant. Effects have not been evaluated against legal standards or requirements.	
3.32	Have the positive effects on the environment been described, as well as the negative effects?	n/a	Not relevant. The project is not likely to result in positive effects on the environment due to the nature and scale of the project.	No

Impact Assessment Methods

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.33	Have the methods used to predict the effects described, and the reasons for their choice, any difficulties encountered, and uncertainties in the results been discussed?	Yes	Yes, adequately addressed. Impact Assessment Methodology is described in detail Chapter 5 of the EIAR.	No
3.34	Where there is uncertainty about the precise details of the Project, and its impact on the environment/climate change, have worst-case predictions been described?	Yes	Yes, adequately addressed. Worst-case predictions are described throughout the EIAR when assessing elements of the project where there is uncertainty. Worst case climate scenarios have not been included as climate has been screened out of further assessment as described in Table 5-2.	No
3.35	Where there have been difficulties in compiling the data needed to predict or evaluate effects, have these difficulties been acknowledged and their implications for the results been discussed?	Yes	Yes, adequately addressed. See response to question 2.23.	No
3.36	Has the basis for evaluating the significance or importance of impacts been described clearly?	Yes	Yes, adequately addressed. See response to question 3.30.	No
3.37	Have the impacts been described on the basis that all Mitigation Measures proposed have been	Yes	Yes, adequately addressed.	

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	implemented i.e. have the residual impacts been described?		Residual impacts have been described for each topic chapter, where relevant, following the inclusion of mitigation measures.	
3.38	Is the level of treatment of each effect appropriate to its importance for the Development Consent decision? Does the discussion focus on the key issues and avoid irrelevant or unnecessary information?	Yes	Yes, adequately addressed.	
3.39	Is appropriate emphasis given to the most severe, adverse effects of the Project with lesser emphasis given to less significant effects?	Yes	Yes, adequately addressed. The following pressures are given more emphasis and discussed in greater detail than other, less significant effects: <u>Chapter 6 Physical Conditions and Marine Processes</u> <ul style="list-style-type: none"> Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion <u>Chapter 7 Benthic and Intertidal Ecology</u> <ul style="list-style-type: none"> Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion <u>Chapter 8 Fish and Shellfish</u> <ul style="list-style-type: none"> Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion Physical change (to another seabed type) <u>Chapter 10 Marine Mammals</u> <ul style="list-style-type: none"> Underwater noise changes – injury Underwater noise changes - disturbance 	No

Other Questions relevant to Description of Effects

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
3.40	Have, with a view to avoiding duplication of assessments, the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report been taken into account? If so, how was this done?	Yes	Yes, adequately addressed. The Greenlink Natura Impact Statement (NIS) was also considered in preparing the EIAR. The results of the NIS are summarised in Chapter 11 of the EIAR.	No

A.4 Consideration of Alternatives

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
4.1	Have the different Alternatives suggested during Scoping been considered and assessed, and if not has justification been provided?	Yes	Yes, adequately addressed. Alternatives are considered in detail in Chapter 3 'Development of the Project and Alternatives' of the EIAR. It is not clear whether any Alternatives were suggested during Scoping.	No
4.2	Have the Developer and practitioners, who are preparing the EIA Report, identified and assessed additional Alternatives (to the ones suggested during Scoping)?	Yes	Yes, adequately addressed. It is not clear whether different Alternatives were suggested during Scoping, however, Alternatives are described within Chapter 3 of the EIAR. Route development was carried out and a number of options were assessed to ensure due consideration and environmental consideration was carried out and an appropriate option was selected. Alternative assessment was carried out on strategy, technology, connection point, landfall cable route.	No
4.3	Have the process by which the Project was developed been described and are the Alternatives to the design of the Project considered during this process been described? (for assistance, see also the guidance on types of Alternatives which may be relevant in the Scoping Guidance Document in this series)	Yes	Yes, adequately addressed. The process by which the project was developed, including consideration of Alternatives is described in detail in Chapter 3 of the EIAR. All alternatives and related considerations are summarised in Table 3-3 of the EIAR.	No
4.4	Have the Alternatives to the design considered during this process been described? (for assistance, see also the guidance on types of alternatives which may be relevant in the Scoping Guidance Document in this series)	Yes	Yes, adequately addressed. Alternative options for the cable route are described in section 3.5 'Offshore Route Selection' of the EIAR.	No
4.5	Have the Alternatives to technology been considered during this process? (for assistance, see also the guidance on types of Alternatives which may be relevant in the Scoping Guidance Document in this series)	Yes	Yes, adequately addressed. Technological alternatives are considered in section 3.2 'Selection of Technology' in the EIAR.	No
4.6	Have the Alternatives to the location considered during this process been described? (for assistance, see also the guidance on types of	Yes	Yes, adequately addressed. Alternative landfall locations were assessed in detail and are described in section 3.4 of the EIAR. Alternative cable routes are described in detail in section 3.5.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	alternatives which may be relevant in the Scoping Guidance Document in this series)			
4.7	Have the Alternatives to the size considered during this process been described (for assistance, see also the guidance on types of alternatives which may be relevant in the Scoping Guidance Document in this series)	N/a	n/a	n/a
4.8	Have the Alternatives to the scale considered during this process been described? (for assistance, see also the guidance on types of alternatives which may be relevant in the Scoping Guidance Document in this series)	N/a	n/a	n/a
4.9	Has the Baseline situation in the 'do-nothing' scenario been described?	Yes	Yes, adequately addressed. The 'do-nothing' scenario was assessed and is described in Section 3.1 of the EIAR.	No
4.10	Are the Alternatives realistic and genuine Alternatives to the Project? (i.e. feasible Project options that meet the objectives)	Yes	Yes, adequately addressed. Yes, the alternatives provided are realistic suggestions and have allowed the most feasible option to be chosen.	No
4.11	Have the main reasons for choosing the proposed Project been provided, including an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects?	Yes	Yes, adequately addressed. The main reasons for choosing this option, including consideration of environmental effects, are provided in section 3.7.	No
4.12	Are the main environmental effects of the Alternatives compared to those of the proposed Project?	Yes	Yes, adequately addressed. The main environmental effects of all options are compared in Table 3-3 in Section 3.6 of the EIAR.	No
4.13	Are Mitigation Measures considered in the assessment of Alternatives? (more on mitigation in section 5 below)	Yes	Yes, adequately addressed. Mitigation measures are not considered in the assessment of alternatives, however, due to the nature of the alternatives assessed, it is not considered necessary.	No

A.5 Description of Mitigation

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
5.1	Where there are significant adverse effects on any aspect of the environment, has the potential for the mitigation of these effects been discussed?	Yes	<p>Yes, adequately addressed.</p> <p>The EIAR identifies a range of effects to environmental receptors associated with the proposed project. While the majority of effects are shown to be limited in extent and duration and therefore considered not significant, a number of effects are identified as potentially significant. These potentially significant effects are assessed within the specific topic chapter. Where an assessment concluded a significant effect, project specific mitigation measures are proposed and described in terms of reducing the magnitude and significance of effects.</p> <p>The EIAR also incorporates 'embedded mitigation'; measures which are inherent part of the design of the project.</p> <p>Embedded mitigation measures are listed in Tables 4-5 and 17-1 of the EIAR, while project specific measures are listed in Table 17-2.</p> <p>Following requests for further information, an updated schedule of mitigation was submitted in 'Greenlink Information to Inform 2nd Public Consultation'. Table 9-1 of this document outlines changes to the mitigation strategy since the EIAR submission.</p>	No
5.2	Have the measures that the Developer has proposed to implement, in order to mitigate effects, been clearly described and is their effect on the magnitude and significance of impacts clearly explained?	Yes	<p>Yes, adequately addressed.</p> <p>See response to question 5.1.</p>	No
5.3	Have any proposed mitigation strategy's negative effects been described?	Yes	<p>Yes, adequately addressed.</p> <p>Project specific mitigation measure PS1 suggests the use of horizontal directional drilling (HDD) to avoid significant adverse effects to intertidal habitats from cable installation, and also describes the potentially negative effect of the need for external cable protection. However, following the Request for Further Information, the HDD exit point has been redesigned to remove the potential need for external cable protection and subsequent mitigation at this location within Hook Head SAC.</p> <p>The use of ADD to deter marine mammals is described in the document 'Greenlink Information to Inform 2nd Public Consultation'. These acoustic devices will be used for only a short period prior to UXO deflagration in order to minimise the introduction of additional noise.</p>	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
5.4	If the effect of Mitigation Measures on the magnitude and significance of impacts is uncertain, has this been explained?	n/a	n/a	No
5.5	Is it clear if the Developer has made a binding commitment to implement the mitigation proposed or acknowledged that the Mitigation Measures are just suggestions or recommendations?	Yes	Yes, adequately addressed. Section 17 of the EIA states that the applicant and their appointed contractor are committed to the effective implementation of all those embedded and project specific measures listed in the Schedule of Mitigation of the EIA. The Schedule of Mitigation will form the basis of an Environmental Management Plan (EMP) to be implemented in all project phases.	No
5.6	Do the Mitigation Measures cover both the construction and operational phases of the Project?	Yes	Yes, adequately addressed. Table 4-5 outlines the embedded mitigation and which project phase (installation, operation or decommissioning) the measures cover. Within each specific topic chapter, project specific mitigation measures are described in terms of project phases.	No
5.7	Have the Developer's reasons for choosing the proposed mitigation been explained?	Yes	Yes, adequately addressed. Justification for all mitigation measures is included in the specific topic chapters.	No
5.8	Have the responsibilities for the implementation of mitigation including roles, responsibilities, and resources been clearly defined?	Yes	Yes, adequately addressed. Roles and responsibilities are outlined in the descriptions of the mitigation measures in Chapter 17 'Schedule of Mitigation'.	No
5.9	Where the mitigation of significant adverse effects is not practicable, or where the Developer has chosen not to propose any mitigation, have the reasons for this been clearly explained?	n/a	n/a	n/

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
5.10	Is it evident that the practitioners developing the EIA Report and the Developer have considered the full range of possible approaches to mitigation, including measures to avoid, prevent or reduce and, where possible, offset impacts by alternative strategies or locations, changes to the Project design and layout, changes to methods and processes, 'end of pipe' treatment, changes to implementation plans and management practices, measures to repair or remedy impacts and measures to compensate impacts?	Yes	<p>Yes, adequately addressed.</p> <p>Throughout the document a number of approaches to mitigation have been taken, including assessment of alternatives, embedded mitigation, industry best practise, project specific mitigation measures and commitment to an EMP.</p>	No

A.6 Description of Monitoring Measures

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
6.1	Where adverse effects on any aspect of the environment are expected, has the potential for the monitoring of these effects been discussed?	Yes	Yes, adequately addressed. Monitoring was originally proposed as project specific measure PS4, outlined in Table 7-8, to monitor colonisation of external cable protection, if used at the HDD exits. Following the Request for Further Information, the HDD exit point has been redesigned to remove the potential need for external cable protection at this location within Hook Head SAC and as a result, monitoring is no longer necessary. No other residual effects are expected that require monitoring.	No
6.2	Are the measures, which the Developer proposes implementing to monitor effects, clearly described and has their objective been clearly explained?	Yes	Yes, adequately addressed. See response to question 6.1.	No
6.3	Is it clear whether the Developer has made a binding commitment to implement the proposed monitoring programme or that the Monitoring Measures are just suggestions or recommendations?	Yes	Yes, adequately addressed. See response to question 6.1.	No
6.4	Have the Developer's reasons for choosing the monitoring programme proposed been explained?	Yes	Yes, adequately addressed. See response to question 6.1.	No
6.5	Have the responsibilities for the implementation of monitoring, including roles, responsibilities, and resources been clearly defined?	Yes	Yes, adequately addressed. See response to question 6.1.	No
6.6	Where monitoring of adverse effects is not practicable, or the Developer has chosen not to propose any Monitoring Measures, have the reasons for this been clearly explained?	Yes	Yes, adequately addressed. See response to question 6.1.	No
6.7	Is it evident that the practitioners developing the EIA Report and the Developer have considered the full range of possible approaches to monitoring, including Monitoring Measures covering all existing environmental legal requirements,	Yes	Yes, adequately addressed Appropriate approach to monitoring has been taken.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
	Monitoring Measures stemming from other legislation to avoid duplication, monitoring of Mitigation Measures (ensuring expected significant effects are mitigated as planned), Monitoring Measures capable of identifying important unforeseen effects?			
6.8	Have arrangements been proposed to monitor and manage residual impacts?	Yes	Yes, adequately addressed. See response to question 6.1.	No

A.7 Quality

Quality of Preparation

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
7.1	Is the EIA Report available in one or more clearly defined documents?	Yes	Yes, adequately addressed. The EIA main report is available in one clear document, the NTS in another document and appendices are also all available in clearly defined documents.	No
7.2	Is the document(s) logically organised and clearly structured, so that the reader can locate information easily?	Yes	Yes, adequately addressed. Document is organised logically; the table of contents is clear and outlines where information can be found.	No
7.3	Is there a table of contents at the beginning of the document(s)?	Yes	Yes, adequately addressed. Table of contents can be found at the beginning of each document.	No
7.4	Is there a clear description of the process that has been followed?	Yes	Yes, adequately addressed. Chapter 5 'Impact Assessment Methodology' clearly describes the process followed.	No
7.5	Is the presentation comprehensive but concise, avoiding irrelevant data and information?	Yes	Yes, adequately addressed. Presentation of EIAR document is comprehensive and concise.	No
7.6	Does the presentation make effective use of tables, figures, maps, photographs, and other graphics?	Yes	Yes, adequately addressed. Tables, figures and maps are used cohesively throughout the document	No
7.7	Does the presentation make effective use of annexes or appendices to present detailed data that is not essential to understanding the main text?	Yes	Yes, adequately addressed. Appendices are included which supplement the information provided in the main report.	No
7.8	Are all analyses and conclusions adequately supported with data and evidence?	Yes	Yes, adequately addressed.	
7.9	Have all sources of data been properly referenced?	Yes	Yes, adequately addressed.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
			Each chapter begins with a 'Data Sources' section which lists the data used in each topic assessment and ends in a reference section that contains reference to all the external documents used to support this EIA report.	
7.10	Has terminology been used consistently throughout the document(s)	Yes	Yes, adequately addressed. Terminology is used consistently throughout the EIAR and its supporting documents.	No
7.11	Does it read as a single document, with cross referencing between sections used to help the reader navigate through the document(s)?	Yes	Yes, adequately addressed. The document reads as a single document, tables and sections are cross referenced as appropriate throughout the document.	No
7.12	Is the presentation demonstrably fair and, as far as possible, impartial and objective?	Yes	Yes, adequately addressed. The presentation of information throughout the EIAR and supporting documents and is demonstrably fair and, as far as possible, impartial and objective.	No

Non-Technical Summary

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
7.13	Does the EIA Report include a Non-Technical Summary?	Yes	Yes, adequately addressed. A non-technical summary (NTS) is attached as a supporting document of the EIA Report.	No
7.14	Does the Summary provide a concise but comprehensive description of the Project, its environment, the effects of the Project on the environment, the proposed Mitigation Measures, and proposed monitoring arrangements	Yes	Yes, adequately addressed.	No
7.15	Does the Summary highlight any significant uncertainties about the Project and its environmental effects	Yes	Yes, adequately addressed. The NTS does not highlight any significant uncertainties.	No

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
7.16	Does the Summary explain the Development Consent process for the Project and the EIA's role in this process	Yes	Partially addressed. The EIA process is detailed in section 4.1 'Environmental Impact Assessment', however, the overall development consent process is not outlined in the NTS.	No
7.17	Does the Summary provide an overview of the approach to the assessment?	Yes	Yes, adequately addressed. See response to question 7.16.	No
7.18	Has the Summary been written in non-technical language, avoiding technical terms, detailed data, and scientific discussion?	Yes	Yes, adequately addressed. The NTS is mostly written in clear concise language however some technical language is used throughout.	No
7.19	Would it be comprehensible to a lay-member of the public?	Yes	Yes, adequately addressed. The report would be comprehensible to a lay member of the public except for the technical language used within some sections.	No

Expertise

No.	Review Question	Relevant?	Adequately Addressed? (Yes, No, Partially, n/a)	Further information needed?
7.20	Is the competency of experts, who are responsible for the preparation of the EIA Report, indicated or otherwise explained in the EIA Report?	Yes	Yes, adequately addressed. Experts involved in the preparation of the EIAR are listed in Appendix B 'Competent Experts Table'.	No
7.21	Has the Developer complied with national or local legal requirements and practices for the selection of experts responsible for the preparation of the EIA Report?	Yes	Yes, adequately addressed. The Competent Experts Table Appendix contains the following information for each member of the project team; <ul style="list-style-type: none"> • Name • Company • Experience (years) • Personal Qualifications; and • Professional Affiliations. This meets the criteria outlined in the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2018)	No