

# 1 INTRODUCTION, SCOPING AND CONSULTATION

## 1.1 INTRODUCTION

This Chapter of the Environmental Impact Assessment Report (EIAR) introduces the proposed Gortloughra Wind Farm (the 'Proposed Development') and provides details of the Environmental Impact Assessment (EIA) Project team and the structure of the report. It defines the key terms of reference used in the environmental assessment of the Proposed Development. The Proposed Development is subject to an EIA, under the *Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment* (EIA Directive)<sup>1</sup> as amended by *Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment* (2014 EIA Directive)<sup>2</sup> as it contains more than five turbines and has a total output greater than 5 MW.

The EIAR has been prepared by Jennings O'Donovan & Partners Limited, on behalf of Gortloughra Wind Farm Limited, to accompany the planning application for planning permission for the Proposed Development. This EIAR takes into account the Project as a whole, and all direct and indirect effects, and cumulative impacts and interactions, including all relevant ancillary and subsidiary elements of the overall Project. Transboundary effects are scoped out from the assessment of this Project. Defined terms are included in Section 1.2, **Table 1.1**.

In addition to the identification, description and individual assessment of the Proposed Development, this EIAR identifies, describes and assesses the Project cumulatively with any other existing, permitted and proposed developments (**Appendix 2.4**). This EIAR includes the conclusions of the competent and qualified experts as to the significance of any such environmental effects, to assist the competent authority to comply with Article 8a of the 2014 EIA Directive.

The planning application is also accompanied by a Natura Impact Statement (NIS). This NIS has been prepared to address the likely or possible significant effects of the Proposed Development on sites designated as Natura 2000 conservation areas, also defined in Irish legislation as European sites as required under Article 6(3) of the *Council Directive*

<sup>1</sup> The European Council Directive 2011/92/EU. Available online at <https://eur-lex.europa.eu/eli/dir/2011/92/oj> [Accessed 17<sup>th</sup> November 2021]

<sup>2</sup> The European Council Directive 2014/52/EU. Available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052> [Accessed 17<sup>th</sup> November 2021]

*92/43/EEC of 21 May 1992, (as amended) on the conservation of natural habitats and of wild fauna and flora (EU Habitats Directive).*

This chapter is supported by Figures (**Volume III**) and the following Appendices (**Volume IV**):

- **Appendix 1.1:** Author Qualifications
- **Appendix 1.2:** Public Consultation Report
- **Appendix 1.3:** Scoping Responses
- **Appendix 1.4:** Glossary of Common Acronyms

### 1.1.1 Statement of Authority

This Chapter has been prepared by David Kiely, Shirley Holton and Kathlyn Feeney, of Jennings O'Donovan & Partners Ltd. (JOD).

David Kiely is a Director of JOD who holds a BE in Civil Engineering from University College Dublin and MSc in Environmental Protection from IT Sligo. He is a Fellow of Engineers Ireland, a Chartered Member of the Institution of Civil Engineers (UK) and has over 40 years' experience. He has extensive experience in the preparation of EIARs and EISs for environmental projects including Wind Farms, Solar Farms, Wastewater Projects, and various commercial developments. David has also been involved in the construction of over 60 wind farms since 1997. David is the key technical reviewer in the preparation of this EIAR.

Shirley Holton is an Environmental Scientist with over 3 years' experience in coordinating EIARs for renewable energy developments. She graduated with a First-Class Honours Degree (BSc. Hons) in Environmental Science from the Institute of Technology, Sligo. She was also awarded with the Governing Body award for a BSc in Environmental Protection. Shirley's key capabilities include project management; using software such as WindPRO 4.1 and ArcGIS Pro; and the preparation of planning applications, Environmental Impact Assessment Reports, Feasibility Studies, Construction & Environmental Management Plans and management plans relating to surface water, peat, spoil and waste.

Kathlyn Feeney is a Graduate Environmental Scientist with a First-Class Honours Degree (BSc. Hons) in Environmental Science from Atlantic Technological University, Sligo. She forms part of the Environmental team responsible for preparing the EIARs. Kathlyn's main responsibilities include supporting more senior consultants in report writing, GIS, Feasibility Studies and Shadow Flicker analysis.

### Other contributors to this Chapter (JOD)

Andrew O'Grady is a Senior Environmental Consultant and holds a Bachelor (Hons.) Degree in Geography from University of Coventry and a MSc. in Environmental Resources Management from the Free University, Amsterdam. He has worked in environmental consultancy for over seventeen years and has prepared various Environmental Reports and EIARs. Andrew is the Project Manager and lead coordinator in the preparation of this EIAR.

## 1.2 KEY DEFINED TERMS

To provide clarity in the EIAR, the following defined terms will be used throughout. **Appendix 1.4** also contains a comprehensive list of common acronyms that are used throughout the EIAR and should be read in tandem with this EIAR.

**Table 1.1: Defined Terms used throughout the EIAR**

Term	Definition
The Site	Refers to all land that falls within the Proposed Gortloughra Wind Farm Site Boundary as shown on <b>Figure 1.1</b> .
The Redline Boundary	Refers to the Proposed Development Boundary.
The Baseline	Refers to the relevant aspects of the current state of the environment
The Proposed Development	Refers to all elements of the Gortloughra Wind Farm for which development consent is sought, the details of which are set out within <b>Chapter 2: Project Description</b> . These elements include the wind turbines site access tracks, Turbine Hardstands, Met Mast, Wind Farm Internal Cabling, borrow pit, Temporary Construction Compound.
The Project	Refers to the development works within the Redline Boundary in addition to the works on the Grid Connection Route Options, the Onsite Substation and Control Building; and lands along the Turbine Delivery Route which are outside the redline and landholding boundary.
Survey Areas	Refers to areas within which surveys are undertaken. These are specifically defined within each technical section.

Term	Definition
Study Areas	Refers to areas which are considered as part of the assessment process. These are specific and defined within each technical section.
Developable Area	Refers to an area within the Redline Boundary where turbines may be located. This does not apply to other ancillary site infrastructure.
The Council	Refers to Cork County Council.
The Developer	Gortloughra Wind Farm Limited
EIA Regulations	The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of the 2014 EIA Directive into the Planning and Development Regulations 2001 (As Amended).
The EIA Directive	Refers to the <i>Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment</i>
The 2014 EIA Directive	Refers to the <i>Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment</i>
Regulation 2022/869	REGULATION (EU) 2022/869 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013
Scoping	The process of identifying the content and extent of the information to be submitted to the Competent Authority under the EIA process, as set out in the <i>Guidelines on the information to be contained in Environmental Impact Assessment Reports</i> (EPA, 2022).
The Onsite Substation and Control Building	Refers to the onsite substation and control building including the compound in which it is located. This section of

Term	Definition
	infrastructure is not contained within the Redline Boundary as it is subject to a separate planning consent process.
Met Mast	Refers to the proposed permanent Meteorological Mast to be located on site.
The Construction Haul Routes	Refers to the proposed haul routes from local quarries and concrete suppliers to the Site.
The Turbine Delivery Route (TDR)	Refers to the proposed turbine delivery route from Port of Cork to the Site.
Grid Connection Route Options	Refers to the proposed route of connecting to the national grid at Dunmanway 110kV Substation (Option A) or Carrigdangan 110kV Substation (Option B).
Wind Farm Internal Cabling	Refers to the electrical cables connecting the turbines to the on-site substation.
Temporary Construction Compound	Refers to the compound to be developed within the Redline Boundary and used by the appointed contractor(s) for the purposes of constructing the wind farm which will be reinstated following completion of construction.
Turbine Hardstand	Refers to the hardstand next to the turbine location used by cranes for erection of turbine hub, nacelles and rotor blades.
Turbine Foundation	Refers to turbine concrete base located under ground level and used to support the turbine hub.
Decommissioning	Refers to the end of the operational life of the wind farm when turbines are dismantled and taken off site for recycling. The turbine foundations will remain in-situ and will be covered with earth and reseeded as appropriate. The turbine hardstands will also be reinstated, and the site roads will be left in-situ. The underground cabling will be removed while the ducting will remain in-situ. The substation building will be left in-situ.
Reinstatement	Reinstatement means restoring the habitat to its original state in the areas of the site where infrastructure was developed.

### 1.3 THE APPLICANT

The Developer – Gortloughra Wind Farm Limited, is a subsidiary of Statkraft Ireland Ltd. Statkraft is a leading company in hydropower internationally and Europe's largest generator

of renewable energy. The Group produces hydropower, wind power, solar power, gas-fired power and supplies district heating. Statkraft is a global company in energy market operations. Statkraft has more than 6,000 employees in over 20 countries.

## 1.4 THE SITE

The Redline Boundary extends to 117.21 ha. All of this is owned by private third-party landowners. The wind farm infrastructure will use an area of 8.7 ha. The general area is comprised of agricultural sheep grazing, farmland and open mountain heath.

The Site is located 9.7 km north-west of Dunmanway, Co. Cork and 19 km south-east of the county boundary between Cork and Kerry. The Site is located on relatively high ground, at elevations ranging from 243 m AOD on the northern side of the site at the entrance 326 m, to 510 m AOD towards the middle of the Site and 306 m AOD on the southern side of the Site. A Site Location Map showing the Redline Boundary is detailed in **Figure 1.1**. The Project boundary, which comprises of all elements of the Project is outlined as **Figure 1.2**.

The Proposed Development is located within a rural setting in the Muscraí Gaeltacht and housing density in the area is low. There are 52 dwellings within a 2 km radius of the proposed turbines, comprising one off houses and farm holdings (**Figure 1.3**). The nearest settlement is Béal Átha An Ghaorthaidh (Ballingeary) which is located approximately 6.3 km north of the Site.

A full description of the Proposed Development and the Project are provided in **Chapter 2: Project Description**.

Based on the feasibility study and constraints mapping, the Site has the potential to accommodate eight 6 MW wind turbines with an overall blade tip height of 175 m. The candidate wind turbines will have a rotor diameter of 150 m and a hub height of 100 m.

Initial Grid Connection Route (GCR) feasibility work has been completed for the Project which has identified the preferred route options that will connect the Proposed Development to the national grid.

This EIAR accompanies the planning application for Proposed Development which will be submitted to Cork County Council. The application for the 110 kV Substation and Grid Connection will be submitted to An Bord Pleanála as a Strategic Infrastructure Development

(SID) under the strategic infrastructure provisions of the Planning and Development (Strategic Infrastructure) Act 2006 (the 2006 Act).

## 1.5 SUMMARY OF THE PROJECT TO BE ASSESSED

Planning Permission is being sought by the Developer for the construction of eight wind turbines, permanent Met Mast, and all ancillary works.

The Proposed Development will comprise of the following main components:

- Erection of eight wind turbines with an overall ground to blade tip height of 175 m consisting of a rotor diameter of 150 m; and a hub height of 100 m.
- Construction of permanent Turbine Hardstands and Turbine Foundations.
- Construction of one temporary Construction Compound with associated temporary site offices, parking areas and security fencing.
- Installation of a meteorological mast with a height of 100m.
- Development of one on-site Borrow pit.
- Construction of new permanent internal site access roads and upgrade of existing internal site access roads to include passing bays and all associated drainage infrastructure.
- Development of a permanent internal site drainage network and sediment control systems.
- All associated underground electrical power and communications cabling connecting the wind turbines to the on-site substation.
- Biodiversity enhancement measures.
- Recreational community improvements including the erection of 4 No. permanent information boards relating to cultural heritage and upgrades to amenity tracks across the site.
- All associated site development works.

A 10-year planning permission and 40 year operational life from the date of commissioning of the entire wind farm is being sought.

This EIAR also assesses the construction of an on-site 110 kV substation and 2 no. GCR options along public roads:

- Option A: Dunmanway 110 kV substation or
- Option B: Carrigdangan 110 kV substation.

While not part of the planning consent for this planning application, this EIA also assesses the works at 18 No. locations along the TDR from Port of Cork to Site and the underground



Grid Connection Route Options from the Site to either the Dunmanway or Carrigdangan 110 kV Substations.

The 2006 Wind Energy Development Guidelines state that “*Planning Authorities may grant permission for a duration longer than 5 years if it is considered appropriate, for example, to ensure that the permission does not expire before a grid connection is granted.*” It is, however, the responsibility of the applicants to request such longer durations in appropriate circumstances. This text is also repeated in the 2019 Draft Wind Energy Development Guidelines (2019) which have not yet been enforced. A 10-year planning permission and 40-year operational life from the date of commissioning of the entire wind farm is being sought.

## **1.6 ENVIRONMENTAL IMPACT ASSESSMENT**

### **1.6.1 Environmental Impact Assessment Requirement and National Legislation**

European Union Directive 2011/92/EU (“the EIA Directive”) as amended requires that, before consent is given for certain public and private projects, an assessment of the likely significant direct and indirect, secondary and cumulative effects on the environment of the Proposed Development. The EIA Directive has been transposed into Irish legislation, for the purposes of this EIA Development, by the Planning and Development Act 2000, as amended (“the Planning Act”) and the Planning and Development Regulations 2001, as amended (“the Planning Regulations”).

**Section 171A** of the Planning and Development Act 2000 (as amended) defines an Environmental Impact Assessment (EIA) as ‘a process—

(a) consisting of—

- (i) *the preparation of an environmental impact assessment report by the applicant in accordance with this Act and regulations made thereunder,*
- (ii) *the carrying out of consultations in accordance with this Act and regulations made thereunder,*
- (iii) *the examination by the planning authority or the Board, as the case may be, of—  
(I) the information contained in the environmental impact assessment report, (II) any supplementary information provided, where necessary, by the applicant in accordance with section 172(1D) and (1E), and (III) any relevant information received through the consultations carried out pursuant to subparagraph (ii),*
- (iv) *the reasoned conclusion by the planning authority or the Board, as the case may be, on the significant effects on the environment of the proposed development, taking*



- into account the results of the examination carried out pursuant to subparagraph (iii) and, where appropriate, its own supplementary examination, and*
- (v) the integration of the reasoned conclusion of the planning authority or the Board, as the case may be, into the decision on the proposed development, and*
- (b) which includes—*
- (i) an examination, analysis and evaluation, carried out by the planning authority or the Board, as the case may be, in accordance with this Part and regulations made thereunder, that identifies, describes and assesses, in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of the proposed development on the following: (I) population and human health; (II) biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive; (III) land, soil, water, air and climate; (IV) material assets, cultural heritage and the landscape; (V) the interaction between the factors mentioned in clauses (I) to (IV), and*
- (ii) as regards the factors mentioned in subparagraph (i)(I) to (V), such 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.*

**Section 172(1)(a)(ii)(I)** requires projects of a class specified in Part 2 of Schedule 5 of the Planning Regulations to be subject to an EIA where:

*“(I) such development would exceed any relevant quantity, area or other limit specified in that Part”.*

Part 2 of Schedule 5 of the Planning Regulations includes the following classes of an EIA Development:

**Class 3(i)** *“Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts.”*

**Class 10(dd)** *“All private roads which would exceed 2000 metres in length”*

**Class 15** *“Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development, but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7”.*

It is considered that the Project comes within the scope of Class 3(i) of Part 2, Schedule 5 of the Planning Regulations and that it is appropriate to carry out EIA of the Project.

### 1.6.2 Directive 2014/52/EU

The EIA Directive (2011/92/EU) was amended by the 2014 EIA Directive (2014/52/EU).

On 1<sup>st</sup> September 2018, the Minister for Housing, Planning and Local Government published updated guidelines for planning authorities and An Bord Pleanála on carrying out EIAs<sup>3</sup>. The publication of the Guidelines coincides with the coming into operation on 1<sup>st</sup> September 2018 of the provisions of the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018). These Regulations transpose the requirements of Directive 2014/52/EU, amending previous Directive 2011/92/EU, on the assessment of the effects of certain public and private projects on the environment (the EIA Directive) into planning law.

Accordingly, this EIAR complies with the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018). Regard has been given to the existing provisions of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001, (as amended) insofar as they transpose the EIA Directive. Article 5 of the EIA Directive as amended by 2014 EIA Directive provides where an EIA is required, the developer shall prepare and submit an EIAR. The information to be provided by the developer shall include at least:

- (a) *a description of the Development comprising information on the site, design, size and other relevant features of the Development*
- (b) *a description of the likely significant effects of the Development on the environment*
- (c) *a description of the features of the Development and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment*
- (d) *a description of the reasonable alternatives studied by the developer, which are relevant to the Development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the Development on the environment*
- (e) *a non-technical summary of the information referred to in points (a) to (d) and*
- (f) *any additional information specified in Annex IV relevant to the specific characteristics of a particular Development or type of Development and to the environmental features likely to be affected*

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<sup>3</sup> Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment, Government of Ireland, August 2018.

The EIAR provides information on the receiving environment and assesses the likely significant effects of the Proposed Development and proposes mitigation measures to avoid or reduce these effects. The function of the EIAR is to provide information to allow the competent authority to reach a reasoned conclusion on the effects of a development and inform subsequent decisions, such as planning. All elements of the Project, (including the GCR and TDR) have been assessed as part of this EIAR.

#### **1.6.2.1 EIA Definition**

Article 1(2)(g) of the 2014 EIA Directive defines EIA as a process consisting of:

- “(i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2)*
- (ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7.*
- (iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7.*
- (iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination, and*
- (v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a”.*

#### **1.6.2.2 Factors of the Environment**

The EIA Directive as amended requires the EIA to identify, describe and assess, in an appropriate manner and in light of each individual case, the direct and indirect significant effects of a project on the following factors:

- (a) population and human health
- (b) biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives
- (c) land, soil, water, air and climate
- (d) material assets, cultural heritage and the landscape
- (e) the interaction between the factors referred to in points (a) to (d)

The effects referred to above on the factors set out shall include the expected effects deriving from the vulnerability of the Project to risks of major accidents and/or disasters that are relevant to the project concerned.

The implementations of the EIA Directive as amended in the EIAR can be seen in **Table 1.2**. Author Qualifications for each of these chapters can be found in **Appendix 1.1**.

**Table 1.2: Outline of respective chapters relating to the requirements of the EIA Directive as amended**

Revised EIA Directive	Chapter	Title
<i>(a) population and human health</i>	5	Population and Human Health
<i>(b) biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives</i>	6	Biodiversity
	7	Ornithology
<i>(c) land, soil, water, air and climate</i>	2	Project Description
	6	Biodiversity
	7	Ornithology
	8	Soils and Geology
	9	Hydrology and Hydrogeology
	12	Material Assets & Other Issues
<i>(d) material assets, cultural heritage and the landscape</i>	12	Material Assets & Other Issues
	13	Archaeology and Cultural Heritage
	11	Landscape and Visual Amenity
<i>(e) the interaction between the factors referred to in points (a) to (d)</i>	18	Interactions of the Foregoing

#### **1.6.2.3 Major Accidents and Disasters**

Major Accidents and Natural Disasters are fully assessed in **Chapter 17**.

#### **1.6.2.4 Alternatives to the Proposed Development**

Article 5(1)(d) of the EIA Directive, as amended requires that the EIAR includes a description of the reasonable alternatives studied by the developer, which are relevant to the Proposed Development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the Proposed Development on the environment.

In addition, Annex IV, paragraph 2 provides that the EIAR include “A *description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.*”.

This is addressed in **Chapter 3: Alternatives Considered** of this EIAR.

#### **1.6.2.5 National Guidance**

The following documents have been referred to in the preparation of this EIAR:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, EPA, May 2022
- The 2014 EIA Directive Circular PL 05/2018
- Department of Housing, Planning and Local Government ‘Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment’ (August 2018)

#### **1.6.2.6 European Guidance**

Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report, European Commission, 2017.

#### **1.6.2.7 Competent Experts and Quality of the EIAR**

Article 5(3) of the 2014 EIA Directive states that, in order to ensure the completeness and quality of the EIAR, the Applicant shall ensure (a) the EIAR is prepared by competent experts; (b) the competent authority shall ensure that it has, or has access to, sufficient expertise to examine the EIAR, and (c) where necessary, the competent authority shall seek from the Applicant any supplementary information, in accordance with Annex IV (the information to be contained in the EIAR), which is directly relevant to reaching a reasoned conclusion on the significant effects of the Project on the environment.

Article 94(e) of the Planning and Development Regulations 2001 (as amended) requires the following information to be provided in an EIAR:

*“(e) a list of the experts who contributed to the preparation of the report, identifying for each such expert—*

*(i) the part or parts of the report which he or she is responsible for or to which he or she contributed,*

*(ii) his or her competence and experience, including relevant qualifications, if any, in relation to such parts, and*

*(iii) such additional information in relation to his or her expertise that the person or persons preparing the EIAR consider demonstrates the expert's competence in the preparation of the report and ensures its completeness and quality."*

The Applicant considers that each of the experts involved in the preparation of this EIAR is competent, having regard to the task he or she has performed, taking account of the scope of the study for which he or she undertook the work, the person/s possess sufficient training, experience and knowledge appropriate to the nature of the work.

This EIAR has been prepared by Jennings O'Donovan & Partners Limited (JOD), Consulting Engineers, Finisklin Business Park, Sligo, F91 2HH9, on behalf of the Developer. JOD are one of the longest established and most reputable multi-disciplinary engineering consultancies in Ireland. Established in 1950, it has grown to be the largest engineering consultancy in the north-west of Ireland. JOD have been an established presence in the Renewable Energy Wind Farm Sector since 1998. To date, the company has a portfolio of project involvement extending to over 2,500 MW of power in Ireland and Northern Ireland and is a recognised market leader in the area of wind energy development. This portfolio will equate, when completed, to an investment of €3 billion in the Wind Energy Sector. Additionally, JOD has attained certificates in line with industry standards as follows:

- ISO 9001:2015 – Quality Management System
- ISO 14001:2015 – Environmental Management System
- ISO 45001:2018 – Occupational Health and Safety Management System

Possession of these certificates is evidence that JOD, have developed, maintained and implemented systems in quality, safety and environmental related matters and are therefore competent experts.

This Project has been completed in line with JOD's Integrated Management System (IMS) which is based on the current versions of ISO 9001 (Quality Management System), ISO 14001 (Environment Management System) and ISO 45001 (Safety Management System). JOD are fully certified and accredited to ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 for the provision of project management, environmental, civil and structural consulting engineering services.

JOD have developed a Quality Policy Statement, an Environmental Policy Statement and a Safety Health and Welfare Policy Statement. It is a stated objective in our Quality Policy Statement that:

*“...Jennings O'Donovan and Partners Limited is committed to complying with the requirements of the quality management system and to continually improve its effectiveness...”*

JOD staff are degree qualified in their respective specialist fields and have developed their competence through both experience on the job and through training. Each team member has developed the following:

- Sufficient knowledge of the specific tasks to be undertaken and the risks which may arise
- Sufficient experience and ability to carry out their duties in relation to the project and to take appropriate actions required under the EIA Directive, as amended.

Specialist consultancies have been employed to complete some of the EIAR Chapters. Each Chapter of the EIAR includes a Statement of Authority regarding the competency of the author and relevant qualifications.

## 1.7 NEED FOR THE DEVELOPMENT

Under the 2009 Renewable Energy Directive<sup>4</sup>, Ireland committed to produce at least 16% of all energy consumed by 2020 from renewable sources. This was to be met by 40% from renewable electricity, 12% from renewable heat and 10% from the renewable transport sector.

### REPower EU Energy Plan 2022

The European Commission presented the REPowerEU plan on 18<sup>th</sup> May 2022<sup>5</sup>. The plan is a key pillar in the EU's response to the disruption which has been caused to energy markets and aims to tackle the climate crisis by transforming Europe's energy system. The plan also forms part of the EU's wider response to Russia's invasion of Ukraine, including several sanctions packages.

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<sup>4</sup> DIRECTIVE 2009/28/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

<sup>5</sup> REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition; European Commission – Press Release. Available online: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_22\\_3131](https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131)  
[Accessed 22/07/2022]



Within the overarching goals of strengthening Europe's climate ambitions, security and economic growth, the REPowerEU plan responds to the current energy situation in four ways:

- energy savings
- the diversification of energy imports
- the acceleration of Europe's clean energy transition
- smart investment

Part 2 of this Communication was entitled 'Pillar 2: accelerate delivery of European Green Deal' and it addressed the actions required to eliminate EU dependence on Russian fossil fuels in the medium term. The express aim of this pillar was to act quickly to achieve diversification of gas supplies and reduction of EU fossil fuel dependency. It was recognised within the text that this goal aligned with the EU's plans for a transition to renewable energy; the green transition detailed in the European Green Deal.

To support this objective, legislative amendments were introduced that culminated in RED III. To bridge the gap until the implementation of RED III, Council Regulation (EU) 2022/2577 was introduced in December 2022 with immediate, binding effect on Member States. Its stated aim was to introduce 'targeted measures which are capable of accelerating the pace of deployment of renewables in the Union in the short term' (recital 3) by the primary means of 'acceleration of the permit-granting processes' (recital 4).

It is of relevance that this Regulation designates all renewable energy infrastructure as being *in the overriding public interest and serving public health and safety when balancing legal interests in the individual case in the context of the Habitats Directive, the Water Framework Directive<sup>6</sup> and the Birds Directive<sup>7</sup> specifically,<sup>8</sup> and furthermore in balancing legal interests generally.<sup>9</sup>*

This level of mandatory prioritisation reflects the crucial importance afforded to renewable energy infrastructure delivery across the EU for the purpose of securing a domestic energy supply.

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<sup>6</sup> Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

<sup>7</sup> DIRECTIVE 2009/147/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on the conservation of wild birds

<sup>8</sup> Article 3(1).

<sup>9</sup> Article 3(2).

## **The Climate Action Plan 2024**

The Climate Action Plan 2024 provides a detailed plan to achieve a 51% reduction in CO<sub>2</sub> emissions by 2030 and net zero by 2050.

In relation to electricity generation, there is a commitment to increase the reliance on renewable energy sources to facilitate an 80% reduction in CO<sub>2</sub> emissions from the electricity generation sector by 2030. This requires increasing the target of on-shore wind energy to 9 GW in line with the National Climate Action Plan 2023 commitments.

The contribution of the Proposed Development to the de-carbonisation of the Irish electricity network will contribute positively to an issue of strategic social importance and highlights the need to remove barriers to the development of renewables, including onshore wind, such as streamlining regulation and encouraging reinforcement of the grid to facilitate greater renewables penetration. The significance of the action plan is underlined by the Irish Government's declaration of a Climate Emergency in 2019.

## **The Renewable Energy Directives 2018 and 2023**

The Promotion of the use of energy from renewable sources (recast) Directive 2018/2001/EU entered into force in December 2018 and was transposed into Irish law in September 2020 by the European Union (Renewable Energy) Regulations 2020. In 2023, the European Union (EU) adopted an amendment of the Renewable Energy Directive (EU/2023/2413), which is referred to as "RED III".

The regulations set the parameters for the establishment of future Renewable Electricity Support Schemes (RESS), and build on the existing regime, which was created by the European Union (Renewable Energy) Regulations 2014<sup>10</sup> (as amended) (the "2014 Regulations"). The ambition of increased electricity from renewable sources will be significantly ramped up.

The RED III sets an 80% target for electricity production from renewable sources by 2030. Ireland is facing significant challenges in efforts to meet these targets, alongside its commitment to transition to a low carbon economy by 2050. Ireland did not meet its 2020 target for renewable energy and is falling behind in the longer-term movement away from fossil fuels.

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<sup>10</sup> <https://www.irishstatutebook.ie/eli/2014/si/483/made/en/print>

RED III raises the share of renewable energy in the European Union's overall energy consumption to 42.5% by 2030, with an additional 2.5% indicative top-up to allow the target of 45% to be achieved.

The Proposed Development is critical to helping Ireland address these challenges as well as addressing the country's over-dependence on unsustainable imported fossil fuels. The need for the Proposed Development is driven by the following factors:

- A requirement to diversify Ireland's energy sources, to achieve national renewable energy targets;
- Avoid significant fines from the EU (the Promotion of the use of energy from renewable sources (recast) Directive 2018/2001/EU);
- A legal commitment under the Kyoto protocol to the United Nations Framework Convention on Climate Change (UNFCCC) from Ireland to limit greenhouse gas emissions;
- A requirement to increase Ireland's national energy security as set out in the Energy White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030';
- Provision of cost-effective power production for Ireland which would deliver local benefits;
- Increase energy price stability in Ireland by reducing an over-reliance on imported gas and exposure to international market price and supply fluctuations.

The Proposed Development will also offer opportunities such as:

- Provision of clean energy whilst minimising environmental impacts;
- Contributing to renewable energy targets which will continue to drive down the overall cost of energy with benefits to the Irish consumer.

The Project will create up to 154 jobs during the construction phase and will encourage continued investment in the renewable industry in Ireland. Wind Energy Ireland (WEI), Ireland's largest renewable energy organisation, in its annual Wind Energy Report for 2023 noted that Ireland's wind energy share of electricity demand in 2023 was 35% compared to 34% in 2022.

The total installed capacity of the Republic of Ireland's wind farms is now 4,332.5 MW<sup>11</sup>; this is approximately enough to power 2.2 million Irish homes annually.

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<sup>11</sup><https://windenergyireland.com/about-wind/the-basics/facts-stats> [Accessed 26/11/2024] .

**Chapter 4** of the EIAR relates to the Planning Policy Context and presents a full description of the international and national renewable energy policy context for the Proposed Development.

**Chapter 15** addresses Climate Change, including Ireland's current status with regard to meeting greenhouse gas emission reduction targets.

### 1.7.1 Public Consultation

A multistage approach was given to public consultation (**Appendix 1.2**) comprising webinars, in person events, newspaper advertising, door to door public engagement and brochures / leaflet distributions. Ample opportunity was given for questions and queries in an accessible way.

Public consultation for the Gortloughra Wind Farm comprised of two phases, the first conducted by EMPower, the former owner of the project, beginning in May 2021 and concluding in January 2024 when the project was acquired by Statkraft. The second phase was conducted by the Statkraft Community Engagement Team from January 2024 - Present. The Statkraft Community Engagement team will continue to be contactable by the local community throughout the lifetime of the Project.

In preparation for the second period of public consultation, conducted by Statkraft Ireland, a Community Liaison Strategy (CLS) was developed by the Community Engagement Team in Statkraft. The CLS involved desk research on the local area including research on the 2016 Census figures, the County and Local Development Plans and feedback received from previous community consultation conducted by EMPower. This was in order to gain an understanding of the local heritage, people and business environment. Additionally, the appointment of a dedicated Community Liaison Officer (CLO) as the main point of contact between the public and the Statkraft Project Team, and how the CLO was to engage with the public throughout the project, was a central part of the CLS. The CLS is based on the 'Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement' and the Aarhus Convention.

The Statkraft Gortloughra CLS was built around key cornerstones such as our commitments to:

- Engage with the local community in an open, honest, and transparent manner;
- Provide clear and understandable information on the project;

- Encourage feedback from local community and to use this information to inform the design and development of the project and;
- Inspire a sense of community ownership of and pride in the project and to instil a sense that their contributions will have shaped the outcome.

#### **1.7.1.1 Online Consultation**

##### **Webinars**

The first project webinar was held online on the 2<sup>nd</sup> June 2021. The following topics were discussed during the project webinar: An introduction of the project; the proposed project area and lay out of turbines; the Community Benefit Fund; social impact; hydrology and ornithology; shadow flicker/sound; construction and civil engineering/archaeology and; the Virtual Consultation Room. Additional webinars were also held in February 2022, April 2023 and November 2023.

##### **Website**

A project-specific website (<https://projects.statkraft.ie/gortloughra-wind-farm/>) was created for the Project. The website includes project information and updates, digitised versions of the Project Booklets (x2) which are outlined above, and information on climate change, renewable energy and biodiversity. The website went live in April 2024 to coincide with the commencement of the Statkraft community engagement period. The purpose of the website is to provide a platform for the local and wider stakeholder community to engage with project material and easily source up-to-date project information. The information on the website has been continually updated as the project progresses. The aim has been to keep the information clear, concise, and engaging on this website.

The website was visited 658 times by over 469 users between April 2024 – December 2024.

##### **Virtual Consultation Room**

A VCR (<https://projects.statkraft.ie/gortloughra-wind-farm/virtual-consultation-room/>) was developed for the Project. The VCR was designed to enable people to engage with the project material virtually. The online site consisted of a full set of photomontages; information on the EIAR process and outcomes; information on the community benefits associated with the project; digitalised booklets (in both English and Irish) and detailed maps of the proposed project and turbine delivery route.

A specialised online form was created to capture feedback from the local community (<https://projects.statkraft.ie/gortloughra-wind-farm/contact-us/>). People also had the

opportunity to subscribe for updates. The form was accessible through QR codes on the Project Booklets (x2) and the 'Sorry we missed you' cards left with residents who the CLO was unable to engage with in person during initial door-to-door consultations. These cards include phone numbers and names of the CLO who had conducted the door-to-door consultations to ensure that feedback could be captured from those without internet access.

#### **1.7.1.2 In Person Events**

An in-person public event was held in February 2022 at the Dunmanway Park Hotel. An additional public event, an information evening, was held in Dunmanway on 4<sup>th</sup> December 2023. The public were given the opportunity to discuss the proposed Gortoughra Wind Farm project with members of the project design team and view the most up to date project information in person. The project information evening was attended by approximately 8 people.

At all stages of the Project's engagement cycle from 2020 to 2024, all communications material included a contact number to the appointed Community Liaison Officer (CLO), project email address and dedicated Project website ([www.gortaloughrawindfarm.ie](http://www.gortaloughrawindfarm.ie)) when launched were included. From this time onward all project updates and newsletters were continuously uploaded to the dedicated project website.

The dedicated project CLO has remained in contact with residents and community groups in the area since April 2024 and will continue to be contactable, by both phone and email, throughout the lifespan of the Gortloughra Project planning application process.

#### **1.7.1.3 Door to Door Community Engagement**

The Statkraft Community Engagement Team conducted two rounds of door-to-door engagement with the local residents living within a 2 km radius of the Proposed Development. This was done in order to introduce Statkraft and the Community Engagement Team after the project acquisition in early 2024. In total there are 74 residential properties occupied within the 2 km radius surrounding the Proposed Development and 15 of these residential properties are occupied within the 1 km radius. Engagement was extended to properties up to 2 km radius. Of the 74 residential properties seven were either vacant, under construction or belonging to elderly residents which the CLO was asked 'not to disturb'. In relation to these elderly residents, project material was left with adjacent neighbours who agreed to pass on the project material.

There were three stages to the community consultation process:

1. The first round of consultation took place in April 2024 and consisted of meeting with residents in the immediate 2 km radius of the Proposed Development. The CLO team went door-to-door visiting residents, supplying project material and in cases when it was not possible to speak with the resident, a 'Sorry I Missed You' card was left to encourage residents to arrange a time for the CLO team to return and discuss the project.
2. A second round of consultation was conducted in August 2024, which followed the same process and was used to present the final project design and inform the residents of the upcoming planning submission and how to access the planning documents online.
3. The third round of consultation took place in November 2024 and consisted of distributing a newsletter to all occupied residential properties within the 2 km radius of the Proposed Development. This Newsletter contained information on the upcoming planning submission (i.e. the exact date of submission and how to access the planning documentation online).

The dedicated project CLO has remained in contact with residents and community groups in the area since April 2024 and will continue to be contactable, by both phone and email, throughout the lifespan of the Gortloughra Wind Farm Project.

Results from three rounds of community consultation are outlined in **Appendix 1.2**.

#### **1.7.1.4 Leaflet Distribution**

Two sets of letters were distributed to houses in the local areas before the public information events, informing them about the webinars and how to register; and the public information evening. The documents related to the webinars and public information evening including the issued letters, newsletters and questions submitted can be found in **Appendix 1.2**.

#### **1.7.1.5 Newsletters**

The public were informed and updated on the Proposed Development through a series of newsletters, outlined below:

- The public were first informed about the Project via newsletters which were distributed on the 22<sup>nd</sup> of May 2021. These newsletters (provided in English and Irish) outlined who Gortloughra Wind Farm Limited are; introduced a project of (then) 9 turbines; outlined the proposed Community Benefit Fund Totalling € 267,741 with payments to neighbours up to 2 km; and the notification of the first project webinar taking place on 2<sup>nd</sup> June 2021.



- The second round of community consultation conducted by Empower Renewables Ireland included the second project newsletter which was distributed on 2<sup>nd</sup> February 2022. This newsletter contained information on project updates; the upcoming webinar; and the first in-person event.
- The third project newsletter was distributed on 2<sup>nd</sup> April 2023. This newsletter contained information on the proposed project; notification of the webinar taking place on the 12<sup>th</sup> April 2023; it included 5 photomontages; turbine layout; design process and the Community Benefit Fund.
- The fourth project newsletter was distributed in June 2023. This newsletter contained information on Design Iteration 3; proposed project; project updates; Community Benefit Fund; it included 3 photomontages; a site map and layout and; TDR proposal.
- The fifth project newsletter was distributed in November 2023. This newsletter contained information on Introduction Design Iteration 3(a); proposed project with reduction of turbines by 1; project updates; 3 photomontages; site map layout; indicative TDR route map; a reduction of the Community Benefit Fund in line with reduction of MW output due to the loss of turbine.

#### **1.7.1.6 Booklets**

##### **First Project Booklet**

The first project booklet distributed during the first round of community consultation was an 8-page booklet that provided details on: the type of project being considered; why the project was being considered in the Shehy More/Coole Mountain area; a map of the proposed project site along with indicative turbine locations; how the residents and the wider community could provide feedback on the proposed project either through the online feedback form or through direct contact with the CLO; Community Benefit Funds and how they work; and lastly on where people could get further information. CLO contact and website details were clearly outlined on this booklet and were aided by a QR code which directed consultees to the project website.

In addition, a separate booklet was distributed, alongside the project booklet, which introduced Statkraft to the residents as the new entity which was developing and managing the Gortloughra project after a handover from EMPower.

There were 81 project booklets distributed during the first consultation period.

## **Second Project Booklet**

The second project booklet contained information on the final project design and was centred around the feedback we received from the first round of consultation with the community. This included: a detailed map of the final design; information on the Near Neighbour Funds; the associated Community Benefit Fund; a map of the proposed turbine delivery route; the subsequent planning applications for the Turbine delivery Route and the Substation/Grid Connection; information on environmental and habitat considerations and; information on the Project Update Subscription Form, VCR, Consultation Feedback Form and the CLO's contact information.

There were 83 project booklets distributed during the second consultation period.

## **Final Project Newsletter**

This project newsletter was developed specifically to update the community on the upcoming planning submission (i.e. the exact date of submission and how to access the planning documentation online) and to thank the community for their engagement.

There were 59 project newsletters distributed.

### **1.7.2 Community Benefit and Community Involvement**

Gortloughra Wind Farm Limited will set up a community benefit fund which will allocate funds from the wind farm to community groups in the area should the wind farm be granted planning and be successful under the Government's RESS support programme.

If consented, the proposed Gortloughra Wind Farm will require a €75.6 million investment and will provide sustainable, low carbon energy generation infrastructure to meet Ireland's growing demand. The Proposed Development benefits to the local community would include significant investment in local infrastructure and electrical systems, local job creation, and a contribution of approximately €17.3 million in Cork County Council rates over the project lifetime of 40 years.

If consented, the proposed Gortloughra Wind Farm will also provide a community fund calculated in accordance with the Renewable Electricity Support Scheme (RESS) Terms and Conditions at €2 per MW h of electricity produced by the project. This is to be made available to the local community for the duration of the RESS (15 years). The average capacity factor of wind energy projects in Ireland is 28.3%<sup>12</sup>. Assuming this efficiency, and

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<sup>12</sup> Community Energy Resource Toolkit Onshore Wind, Sustainable Energy Authority of Ireland, August 2024.

a capacity of c. 54MW, the community benefit fund would amount to an average of €267,741 per annum. The actual fund will vary around this average from year to year, depending on each year's wind conditions. Wind measurements at the Study Area suggest that Gortloughra could be capable of achieving an above average capacity factor, and therefore a larger community fund.

It is proposed that an annual minimum payment of €1,000 will be provided to each household within 1km of any proposed turbine. An annual minimum payment of €500 will be provided to each household located between 1km and 2km of a turbine. It is proposed that these payments will be fixed and will not fluctuate. 40% of the fund, amounting to approximately €107,096 per year in this example, will be allocated to not-for-profit community enterprises, with an emphasis on low carbon initiatives. The remainder of the fund will be directed towards local clubs, societies and other initiatives. It is envisaged that the communities nearest the Proposed Development will benefit most from any Community Fund. It is envisaged that the Developer will engage directly with the local community to reach agreement on how the money can best be allocated.

## 1.8 EIAR STRUCTURE

This EIAR uses the grouped structure method to describe the existing environment, the potential impacts of the Proposed Development thereon and the proposed mitigation measures. Background information relating to the Proposed Development, scoping and consultation undertaken and a description of the Proposed Development are presented in separate sections. The grouped format sections describe the impacts of the Proposed Development in terms of human beings, biodiversity, soils and geology, hydrology and hydrogeology, air and climate, noise and vibration, landscape and visual, cultural heritage and material assets such as traffic and transportation, together with the interactions of the foregoing. Please note that the Irish Transverse Mercator coordinate system is used in the EIAR document.

The layout of this EIAR is arranged in four volumes, I-IV.

**Volume I:** This volume includes the opening **Non-Technical Summary (NTS)**. It is a condensed and easily comprehensible version of the EIAR document. The NTS is presented in a similar format to the main EIAR document and comprises descriptions of the Proposed Development, the receiving environment, impacts, mitigation measures and interactions presented in a grouped format. It is a standalone document.

**Volume II:** This volume contains the main text of the **Environmental Impact Assessment Report (EIAR)**. The EIAR is presented using the grouped structure method and describes the existing environment, the potential impacts of the Proposed Development thereon and the proposed mitigation measures. Background information relating to the Proposed Development, scoping and consultation undertaken and a description of the Proposed Development are presented in separate Chapters. The grouped format Chapters describe the impacts of the Proposed Development in terms of human beings, biodiversity, soils and geology, hydrology and hydrogeology, air and climate, noise, landscape and visual, cultural heritage and material assets such as traffic and transportation together with the interaction of the foregoing.

The chapters in this **Volume II: EIAR** are as follows:

- Chapter 1: Introduction, Scoping and Consultation
- Chapter 2: Project Description
- Chapter 3: Alternatives Considered
- Chapter 4: Planning Policy Context
- Chapter 5: Population and Human Health
- Chapter 6: Biodiversity
- Chapter 7: Ornithology
- Chapter 8: Soils and Geology
- Chapter 9: Hydrology and Hydrogeology
- Chapter 10: Noise
- Chapter 11: Landscape and Visual Amenity
- Chapter 12: Material Assets and Other Material Issues
- Chapter 13: Cultural Heritage
- Chapter 14: Traffic and Transportation
- Chapter 15: Air and Climate
- Chapter 16: Shadow Flicker
- Chapter 17: Major Accidents and Natural Disasters
- Chapter 18: Interactions of the Foregoing

### **Volume III: EIAR Figures and Drawings**

The Figures and Drawings referred to in each chapter of the EIAR are compiled separately in Volume III. Figures are numbered sequentially for each chapter in which they are principally referred.

## Volume IV: Appendices

The Appendices referred to in each chapter of the EIAR are compiled separately in Volume IV. They are also numbered sequentially for each chapter in which they are principally referred.

## 1.9 EIAR PREPARATION

### 1.9.1 Introduction

JOD had overall responsibility for the coordination of the EIAR with input from other independent specialist consultants where necessary. The competency of JOD has been outlined in Section 1.6.2.7. **Table 1.3** provides details of the contributors of each aspect of the EIAR. Further details on the qualifications of each lead author can be found in **Appendix 1.1** and in the Statement of Authority in each individual technical assessment chapter.

**Table 1.3: EIAR Preparation Details**

EIA Chapter	Contributor & Qualifications	Years of Experience
Chapter 1: Introduction	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
	Mr. Andrew O'Grady, BSc., MSc. AIEMA, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited	17
Chapter 2: Project Description	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
Chapter 3: Alternatives Considered	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
Chapter 4: Planning Policy Context	Mr. David Kiely, B.E., M.Sc., Eur.Ing., C.Eng., FIEI, MICE, F.RConsEI, Director, Jennings O'Donovan & Partners Limited	41
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 5: Population and Human Health	Mr. David Kiely, BSc MSc, Director, Jennings O'Donovan & Partners Limited	41

EIA Chapter	Contributor & Qualifications	Years of Experience
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 6: Biodiversity	Mr. Pat Doherty, MSc., BSc., CIEEM, Director, Doherty Environmental Services	17
Chapter 7: Ornithology	Mr. Ben O'Dwyer (FT Ecologist, BSc (Hons) Wildlife Biology),	8
	Ms. Éimear Stephenson (FT Ecologist, BSc (Hons) Marine Science, MSc (Hons) Biodiversity and Conservation),	3
	Ms. Kate O'Regan (BSc (Hons) Zoology; MSc (Hons) Marine Biology),	2
	Ms. Rebecca Furlong (FT GIS Technician; BSc Earth and Ocean Sciences, Cert. Geographic Information Systems, MEngSc Civil and Environmental Engineering),	9
	Mr. Jack Glennon (MSc Marine Biology from University College Cork and a first-class BSc in Wildlife Biology from Munster Technological University)	2
	Mr. Jon Kearney (FT Director Ecologist; BSc. Applied Ecology MSc. Ecological Management and Biological Conservation),	19
	Ms. Orla Cummins (Graduate Ecologist first-class BSc Ecology and Environmental Biology)	1
Chapter 8: Soils and Geology	Mr. Andrew Garne, PGeo, BSc., MSc., MIGI, MIAH, Geologist, EcoQuest Environmental Limited	30
Chapter 9: Hydrology and Hydrogeology	Mr. David Parkinson, BSc., MIEMA, CEnv, Principal Environmental Consultant, EcoQuest Environmental Limited	10
Chapter 10: Noise	Mr. Brendan O'Reilly, MPhil., Director, Noise & Vibration Consultants Limited	40
Chapter 11: Landscape and Visual Amenity	Mr. Richard Barker, MLA, BA Env. PG Dip For MILI, Director, Macro Works Limited	25
Chapter 12: Material Assets and Other Issues	Mr. Andrew O'Grady, BSc., MSc. AIEMA, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited	17
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 13: Cultural Heritage	Mr. Tony Cummins, BA., MA., Senior Archaeologist, John Cronin & Associates	25
Chapter 14: Traffic and Transport	Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited	41
	Mr. John Doogan, NDip. CEng. (HND), Senior Roads Technician, Jennings O'Donovan & Partners Limited	35
Chapter 15: Air and Climate	Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited	41

EIA Chapter	Contributor & Qualifications	Years of Experience
	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1
Chapter 16: Major Accidents and Natural Disasters	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
Chapter 17: Interactions of the Foregoing	Ms. Shirley Holton, BSc., Environmental Scientist, Jennings O'Donovan & Partners Limited	3
	Kathlyn Feeney, Graduate Environmental Scientist, Jennings O'Donovan & Partners Limited	1

### 1.9.2 Chapter Structure

Each technical assessment included in the EIAR has followed the same general format:

- **Assessment Methodology and Significance Criteria:** A description of the methods used in baseline surveys and in the assessment of the significance of effects
- **Baseline Description:** A description of the Site's existing baseline (i.e., the relevant aspects of the current state of the environment), based on the results of surveys and desk information and consultations
- **Assessment of Potential Environmental Effects:** A description of how the baseline environment could potentially be affected for the Project including a summary of the measures taken during the design of the Project to minimise effects
- **Mitigation Measures and Residual Effects** - A description of measures recommended that will be implemented to reduce and/or off-set potential negative effects and a summary of the assessed level of significance of the effects of the Proposed Development and/or the Project after mitigation measures have been implemented
- **Cumulative Effects:** A description identifying the potential for effects of the Project to combine with those from other existing, pending and/or permitted developments to affect resources
- **Statement of Significance of effects** A description of the significant effects as per the EPA guidelines

The significance of effects resulting from the Project will be determined through consideration of a combination of the sensitivity of the receiving environment and the predicted level of change from the baseline state. Environmental sensitivity can be categorised by several aspects including factors such as the transformation of natural landscapes, the protection afforded to, and presence of, European sites, rare or endangered species, land use and fisheries.



Sensitivity of classification of the receiving environment can vary between the different technical areas of assessment e.g., ecology, hydrology, population and human health and visual. In general, this EIAR largely follows the principles and terminology of the 2022 EPA 'Guidelines on the information to be contained in Environmental Impact Assessment Reports'<sup>13</sup> in relation to the identification of significant effects. Where a technical assessment has adopted an alternative to this process, such as following technical guidance bespoke to that topic, such assessment criteria are made clear in that chapter. **Table 1.4** highlights the general framework for the assessment of significance of effects.

**Table 1.4: Impact Classification Terminology (EPA Guidelines, 2022)**

Impact Characteristic	Term	Description
Quality	Positive	A change which improves the quality of the environment
	Neutral	No effects or effects that are imperceptible within normal bounds of variation or within the margin of forecasting error
	Negative	A change which reduces the quality of the environment
Significance	Imperceptible	An effect capable of measurement but without significant consequences
	Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences
	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
	Significant	An effect, which by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment
	Very significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment
	Profound	An effect which obliterates sensitive characteristics
Extent & Context	Extent	Describe the size of the area, number of sites and the proportion of a population affected by an effect
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions

<sup>13</sup> [https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR\\_Guidelines\\_2022\\_Web.pdf](https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf)

Impact Characteristic	Term	Description
Probability	Likely	Effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented
	Unlikely	Effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented
Duration and Frequency	Momentary	Effects lasting from seconds to minutes
	Brief	Effects lasting less than a day
	Temporary	Effects lasting less than a year
	Short-term	Effects lasting one to seven years
	Medium-term	Effects lasting seven to fifteen years
	Long-term	Effects lasting fifteen to sixty years
	Permanent	Effect lasting over sixty years
	Reversible	Effects that can be undone, for example through remediation or restoration
	Frequency	Describe how often the effect will occur, (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Type	Indirect	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway
	Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	'Do Nothing'	The environment as it would be in the future should the subject project not be carried out
	'Worst Case'	The effects arising from a project in the case where mitigation measures substantially fail
	Indeterminable	When the full consequences of a change in the environment cannot be described
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual	Degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic	Where the resultant effect is of greater significance than the sum of its constituents

### 1.9.3 Significance Criteria

The significance of the potential effects of the Proposed Development have been classified by taking into account the sensitivity of receptors and the magnitude of the potential effects on them, combined with the likelihood of an impact occurring as defined in **Table 1.5**.

**Table 1.5: Rating of Significant Environmental Impacts (EPA Guidelines, 2022)**

Description of Impact Character/Magnitude/Duration/Probability/Consequences					
Magnitude of Significance /Sensitivity		Negligible	Low	Medium	High
	Extremely High	Not Significant	Profound/ Very Significant	Profound	Profound
	Very High	Not Significant	Moderate	Significant	Profound/ Very Significant
	High	Not Significant	Slight	Significant/ Moderate	Very Significant
	Medium	Not Significant/ Imperceptible	Slight	Moderate	Significant/ Moderate
	Low	Imperceptible	Slight/ Not Significant	Slight	Slight/ Moderate
	Negligible	Imperceptible	Imperceptible	Imperceptible	Imperceptible

#### 1.9.3.1 Mitigation Measures and Residual Effects

There are three established strategies for impact mitigation - avoidance, reduction and remedy. The efficacy of each is directly dependent on the stage in the design process at which environmental considerations are taken into account, (i.e., impact avoidance can only be considered at the earliest stage, while remedy may be the only option available for projects where avoidance and reduction were not possible).

The EIA co-ordinator has engaged with stakeholders, which has provided the benefit of developing and refining mitigation through an iterative process rather than 'adding on' such measures at the end of the Project. Mitigation measures have been prioritised and embedded into the design phase of the Project to avoid, reduce and offset any significant adverse effects. These are referred to within this EIAR as 'embedded mitigation'.

Relevant mitigation measures are discussed within each technical Chapter of this EIAR. **Appendix 18.1** provides a summary of mitigation measures for all technical assessments.

### 1.9.3.2 Cumulative Effects

The assessment has considered 'cumulative effects'; these are effects that result from increasing changes caused by past, present or those which are reasonably foreseeable together with the Proposed Development. Consideration has been given to the combined cumulative effects of several developments that may, on an individual basis, be insignificant, but which cumulatively may give rise to a significant effect.

A list of projects that have been included in the cumulative assessment of effects in this EIAR are included in **Appendix 2.4**. This includes all small, medium and large-scale developments within 10 km of the Site that are currently active in the planning system.

The cumulative impacts of the projects listed in **Appendix 2.4** are assessed for potential effects during the construction, operation and decommissioning of the Proposed Development. This is further detailed through chapters 5 to 18 of this EIAR.

### 1.9.3.3 Statement of Significance of Effects

The statement of significance outlines the conclusion of each technical assessment in order to provide a final overall conclusion as to the significance of the Proposed Development under the terms of the EIA Directive 2011/92/EU (EIA Directive) and the 2014 EIA Directive 2014/52/EU (2014 EIA Directive).

## 1.10 SCOPING AND CONSULTATION

The scoping and consultation process was carried out in accordance with the EIA Directive and in accordance with the Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, May 2022).

The 2014 EIA Directive Circular (PL 05/2018) notes that:

*"It is a requirement of the EIA process to consult with statutory consultees and to take into account any submissions made by these consultees. Such submissions may contain expert specialist opinions on topics to be assessed in the EIA process..."*

A scoping exercise was carried out in September 2021 with updates sent in June 2023 due to the time lapse and changes in the layout and a further update was issued in April 2024 to inform consultees of grid connection Option B Carrigdangan 110kV Substation. **Table 1.6** documents individuals and organisations that have been consulted as part of the EIA process. The purpose of this consultation process was to provide a focus for the EIA by identifying the key issues of relevance. As such, the consultation process informs the

various organisations of the Proposed Development, thereby providing an opportunity to submit comments and to offer information relevant to the preparation of this EIAR. Responses can be found in **Volume IV, Appendix 1.3: Scoping Responses**.

**Table 1.6: Summary of Scoping Responses Received on The Project**

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
Cork County Council	<p>Response received 11<sup>th</sup> April 2022:</p> <p><u>Planning Policy Context</u></p> <p>The following observations apply:</p> <ul style="list-style-type: none"> <li>The site is located in an area where windfarms are 'Open for Consideration'</li> <li>Landscape Character is defined as 'Ridged and Peaked Upland (15a)'</li> <li>Within a 'Transitional Rural Area' housing policy area</li> <li>Highly visible from designated Scenic Route (529 - the R585) to the south and the Pass of Keimaneigh to the west (528)</li> <li>Key considerations are impact on the landscape character and quality and impact on highly scenic views obtainable from designated scenic routes on important tourist routes</li> <li>Cumulative impacts and inter-visibility with built and permitted windfarms key concern</li> <li>High density of residential development, particularly in the Coolmountain area</li> <li>Site is within the Screening Zone for the Bandon River SAC (Site Code 002171)</li> <li>Grid connection should be finalised and included in EIAR</li> <li>Site is c.10km from county boundary and transboundary effects, if any, should be considered</li> </ul> <p><u>Relevant Objectives</u></p> <p>Particular regard should be had to the following objectives: ED 3-5 Open to Consideration Commercial wind energy development is open to considerations in these areas where proposals can avoid adverse impacts upon:</p> <ul style="list-style-type: none"> <li>Residential amenity particularly in respect of noise, shadow flicker and visual impact.</li> <li>Urban areas and metropolitan /Town green belts.</li> <li>Natura 2000 sites (SPA and SAC), Natural Heritage Area (pHNA's) or adjoin areas affecting their integrity;</li> <li>Architectural and archaeological heritage.</li> <li>Visual quality of the landscape and the degree to which impacts area highly visible over wider areas.</li> </ul> <p>ED 6-1 and ED 6-2 Support grid connection and facilitate practical and feasible infrastructure and feasibility of undergrounding especially in high landscape character areas.</p> <p>GI 2-1 Develop and implement a Green Infrastructure Strategy for County Cork. Help to identify, protect, manage and develop green infrastructure resources.</p> <p>GI 3-1 Require new development to contribute to the protection and enhancement of the existing green infrastructure of the County.</p> <p>GI 6-1: Landscape</p> <ol style="list-style-type: none"> <li>Protect the visual and scenic amenities of County Cork's built and natural environment.</li> <li>Landscape issues will be an important factor in all land-use proposals, ensuring that a proactive view of development is undertaken while maintaining respect for the environment and heritage generally in line with the principle of sustainability.</li> <li>Ensure that new development meets high standards of siting and design.</li> <li>Protect skylines and ridgelines from development.</li> <li>Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.</li> </ol> <p>GI 7-2: Scenic Routes</p> <p>Protect the character of those views and prospects obtainable from scenic routes and in particular stretches of scenic routes that have very special views and prospects.</p> <p>GI 7-3: Development on Scenic Routes</p> <p>Demonstrate that there will be no adverse obstruction or degradation of the views towards and from vulnerable landscape features including mitigation measures to prevent significant alterations to the appearance or character of the area and encourage appropriate landscaping and screen planting.</p> <p>GI 13-1 Minimise Noise Pollution associated with development having regard to relevant standards published guidance and the receiving environment and support Noise Action plans.</p> <p>GI 13-2 Minimised Light Pollution</p>	Yes. All items assessed in the EIAR.	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p><i>GI 10-3 Preserve and protect groundwater</i></p> <p><i>HE 2-1 Protect all Natural Heritage sites including Special Area of Conservation, Special Protection Area, Natural Heritage Areas, Statutory Nature reserves, Refuges for Fauna and Ramsar.</i></p> <p><i>HE 2-2 Protect plant and animal listed species.</i></p> <p><i>HE 2-7 Control of invasive plant and animal species including Japanese knotweed HE 3-1: Protection of Archaeological Sites</i></p> <p><i>Safeguard sites and settings, features and objects of archaeological interest generally. b) Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments including the Sites and Monuments Record (SMR) (see www. archaeology.ie) and the Record or Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, as amended and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Department of Arts, Heritage and Gaeltacht as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage.</i></p> <p><i>HE 3-3: Zones of Archaeological Potential</i></p> <p><i>Protect the Zones of Archaeological Potential (ZAPs) located within historic towns and other urban areas and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the potential for subsurface archaeology and if archaeology is demonstrated to be present appropriate mitigation (such as preservation in situ/buffer zones) will be required.</i></p> <p><i>HE 3-4 Industrial and Post Medieval Archaeology</i></p> <p><i>Protect and preserve the archaeological value of industrial and post medieval archaeology such as mills, limekilns, bridges, piers, harbours, penal chapels and dwellings. Proposals for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment.</i></p> <p><u>Archaeology</u></p> <p><i>The Council's Archaeologist has made the following observations:</i></p> <ul style="list-style-type: none"><li><i>The study should be extended to include archaeological monuments in the wider landscape with astronomical association intervisible from the proposed development site and assessed the proposed development the impact on same. Certain Viewing points assessment should be guided by the appointed archaeologist.</i></li><li><i>Provide a clear definition on what is covered under Cultural heritage. All heritage features should be identified and assessed within the proposed development site</i></li><li><i>i.e. inclusion of built heritage features as part of the tangible cultural heritage (i.e. outside what is identified as archaeological monuments and architectural heritage)</i></li><li><i>There is considerable concern regarding visual impact on the archaeological monuments both individually and collectively and their setting given the dense number and nature of the monuments within the development site. A robust assessment is required to demonstrate the visual impact of the development on the setting of the monuments individually and collectively as a historic/prehistoric landscape and the significance of same should be provided.</i></li><li><i>Given the nature of the terrain and the density of the monuments there is significant potential to identify previously unrecorded archaeological sites both above and below ground and the results guide design and layout and some level of site testing may be required as part of the assessment.</i></li><li><i>The appointed archaeologist should be suitably qualified and experienced and liaise with the County Archaeologist when preparing the EIAR following site inspection.</i></li></ul> <p><u>Environment</u></p> <p><i>The following are the requirements of the Council's Environment Officer:</i></p> <ul style="list-style-type: none"><li><i>A map of the site showing all occupied dwellings within the 500m zone and the 1000m zone of the wind turbines.</i></li><li><i>Within the 500m zone and the 1000m zone of the wind turbines, the applicant should provide details of the predicted noise levels — noise levels should be 43dB or less.</i></li><li><i>A Waste management Plan giving details of the management of waste at the site during the construction phase shall be included</i></li></ul> <p><u>Ecology</u></p> <p><i>The Council's Ecology Officer makes the following observations:</i></p>		



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<ul style="list-style-type: none"> <li>I have reviewed the submitted scoping document from an ecological perspective and my original preplanning advice issued under reference PPW 21/793 remains true. I note as per the supplied information 'Outside of the planted areas, much of the lower/mid slopes are characterised by peatland habitats that include intact, active blanket bog, cutover blanket bog, wet heath, dry heath, siliceous rock and a mosaic of the above habitats in places'.</li> <li>The Ecology Office would recommend that no such development take place on intact peatland habitats and be avoided on degraded peatland habitats or any habitats of high natural value. For this reason, this site raises a red flag for me, and I would refer you to policy HE 2-3 of the CDP.</li> <li>Furthermore, species-specific surveys which are deemed to be required must be completed by qualified and experienced practitioners following recognised best practise methods. Survey licences required, where applicable, should be submitted as part of the application. Data, locations, status and extent of the recorded protected sensitive species e.g. Freshwater Pearl Mussel populations &amp; Hen Harrier winter roosts etc., may be submitted as confidential reports if there are relevant issues of concern relating to the locations arising.</li> <li>The design and site layout of the proposal should be informed by the information gathered during the survey stage and the ecological assessment, ensuring all high valued habitats e.g. peatland habitats, and areas around known breeding sites, resting sites and key foraging and commuting areas for sensitive species are avoided.</li> </ul> <p><u>Note:</u> Given the occurrence of peatland habitats at the site, a peat stability assessment to manage all risks associated with peat instability should / will likely be provided. I note that any such peat stability assessment and peat management plan would need to be examined by technically competent persons on behalf of Cork County Council to assess the conclusions of these reports and ensure the site is safe from the risk of peat failure/slips/slides or erosion.</p> <p><u>Engineering</u></p> <p>The Area Engineer makes the following observations:</p> <ul style="list-style-type: none"> <li>Developer will need examination options, other than the routing of cables along the public road. It is important that applications for significant service connections between the increasing number of remote power generating facilities and interconnectors, be planned in great detail at application stage so that nothing is left to chance at construction stage.</li> <li>In summary the significant issues that need to be addressed at this stage are: Their installation of services within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure and the subgrade may be poor).</li> <li>The position of service trenches along a road needs to be agreed in advance and any deviation from the detailed design, at construction stage, should require the approval of the local authority.</li> <li>The location of cables is required to be recorded as accurately as possible so as to facilitate the further use of road space for utilities and the maintenance of the public road by the Roads authority. This record should be lodged with the local authority and with the Utility for retention on their records.</li> <li>Cables shall be routed away from bridge structures and developers specifically prevented from attaching cables to road bridges. Proposed alternatives such as river bed crossings need to be feasibility proofed at planning stage by trial-holing etc. and included in EIS assessments so as to avoid having to consider alternatives which may be deemed not covered by planning/EIS.</li> <li>Any chambers proposed within the public road cross section need to be designed to minimise the effect on the Roads Authority in its role of construction and maintenance.</li> <li>Rationalisation of the number of cables involved (including existing electric or possible future cables) and their diversion into one trench, in order to minimise the impacts on the road network and the environment along the road boundary (hedgerows) should also be demonstrated as having been considered by the Developer.</li> <li>Developer to comply with all appropriate standards and the Guidelines for Managing Openings in Public Roads, 2017 in order to ensure orderly development or conditioning even further reinstatement requirements as deemed appropriate allowing for damage to roads from construction traffic etc., The conditioning of a bond, equivalent to full road overlay on roads to be used for deliveries etc. or requiring the Developer to strengthen such roads in advance, to ensure that the standard of the road surface is at least restored to its original condition or to an improved condition if such routes are to be used for access for maintenance of the facility thereafter.</li> <li>Suitable routes for services, construction traffic and delivery must be set out and agreed at planning stage with no deviation thereafter. Diversion routes for traffic temporarily diverted whilst the works are being undertaken must also be agreed and detailed at planning stage.</li> <li>Details of all surface water culverts to drawing on the route map, and any damaged during the laying of the service must be properly repaired and notified to the Area Engineer. Likewise, for watermains, to Irish Water Engineers.</li> <li>On step sections of rural roads, consideration needs to be given to the use of a backfill material which is resistant to being washed away during severe weather events.</li> <li>Trenchless pipelaying will only be considered in exceptional circumstances.</li> </ul>		

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>The Area Engineer notes little detail is supplied regarding the turbine delivery route and indicates that the submitted map is very difficult to read, despite extensive knowledge of the area. The report notes a large number of residential properties with a dwelling located 600m from T6 but not shown on figure 14.1.</p> <p><u>Conclusion</u> The Information to be contained in EIAR — the Scoping Report submitted covers the various EIAR requirements already — should follow all relevant guidelines including EIA guidelines, relevant Wind Energy Guidelines, EPA advice notes and relevant legislation.</p> <p>The developer should be advised that the Planning Authority has serious concerns regarding the scale and location of the proposed development and likely adverse visual impact and serious concerns regarding the likely impact on the quality of views obtainable from an important designated Scenic Route— as was indicated during pre-planning engagement.</p> <p>The Planning Authority notes that a Viewpoint Selection report will be prepared for consultation and agreement with relevant stakeholders and particularly with Cork County Council. Selected viewpoints from the 'Wild Atlantic Way' tourist route and designated 'high value landscape' areas should also be included.</p> <p>Reasonable alternatives considered shall be included and must also indicate the main reasons for the site selected taking into account the effects of the project on the environment.</p> <p>The above planning policy considerations and comments from internal departments should be forwarded to the developer for inclusion within the scope of the Environmental Impact Assessment Report. The developer should be advised that the issues highlighted by the Planning Authority are not intended to be definitive and further issues may evolve as the project progresses.</p> <p>Updated scoping exercises took place in June 2023 and April 2024.</p> <p>No further responses were received.</p>		
Kerry County Council	<p><b>Response received 9<sup>th</sup> June 2023:</b> please note that the Kerry CDP 2022-2028 is now the relevant County Development Plan for Kerry... ...These should be taken into consideration as part of the proposal. In addition, please note that should the proposed site be of potential importance to White Tailed Eagle, the mitigation to prevent eagle mortality implemented on the Grousemount Wind Farm, Co Kerry may be of relevance.</p> <p><b>Response received 15<sup>th</sup> April 2024:</b> A Scoping Opinion was previously given in relation to an Environmental Impact Assessment (EIA) for the proposed Gortloughra Wind Farm, Dunmanway, Co Cork.</p> <p>The contents of the letter are noted, and Kerry County Council have nothing further to add in relation to the proposed changes to this development at this time.</p>	Ornithological studies carried out.	6, 7
<b>Agriculture</b>			
Forest Service	<ol style="list-style-type: none"> <li>that there is a requirement inter alia under the EIA Directive for an overall assessment of the effects of the project or the alteration thereof on the environment to be undertaken, including the direct and indirect environmental impact of the project; and</li> <li>pursuant to Article 2(3) of the EIA Directive, the Department of Agriculture, Food and the Marine strongly recommends that, notwithstanding the fact that a parallel consent in the form of felling licence may also have to be applied for, any EIAR and/or NIS produced in connection with the application for planning permission to the Local Planning Authority or An Bord Pleanála, should include an assessment of the impact of and measures, as appropriate, to prevent, mitigate or compensate for any significant adverse effects direct or indirect identified on the environment arising from such felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species.</li> <li>Please note that there must be absolute spatial consistency between the felling licence areas submitted to DAFM (second authority) and all related planning documents submitted to the first authority in respect of the felling area(s)</li> </ol>	No forestry within the Redline Boundary.	
Department of Agriculture, Food and the Marine	<p>Response received 7<sup>th</sup> July 2023:</p> <p>If the proposed development will involve the felling or removal of any trees, the developer must obtain a Felling License from this Department before trees are felled or removed. A Felling Licence application form can be obtained from Felling Section, Department of Agriculture, Food and the Marine, Johnstown Castle Estate, Co. Wexford.</p>	No forestry within the Redline Boundary.	

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p><i>The developer should take note of the contents of Felling and Reforestation Policy document which provide a consolidated source of information on the legal and regulatory framework relating to tree felling; <a href="https://www.agriculture.gov.ie/media/migration/forestry/treefelling/FellingReforestationPolicy240517.pdf">https://www.agriculture.gov.ie/media/migration/forestry/treefelling/FellingReforestationPolicy240517.pdf</a>. As this development is within a forest lands particular attention should be paid to deforestation, turbulence felling and the requirement to afforest alternative lands.</i></p> <p><i>It is important to note that when applying to a Local Authority or An Bord Pleanála for planning permission where developments are:</i></p> <p><i>a) subject to an EIA procedure (including screening in the case of a sub-threshold development) and any resulting requirement to produce an EIAR; and/or</i></p> <p><i>b) subject to an Appropriate Assessment procedure (including screening) and any resulting requirement to a Natura Impact Statement (NIS); and</i></p> <p><i>c) the proposed development in its construction or operational phases, or any works ancillary thereto, would directly or indirectly involve the felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species,</i></p> <p><i>1. that there is a requirement inter alia under the EIA Directive for an overall assessment of the effects of the project or the alteration thereof on the environment to be undertaken, including the direct and indirect environmental impact of the project; and</i></p> <p><i>2. pursuant to Article 2(3) of the EIA Directive the Department of Agriculture, Food and the Marine strongly recommends that notwithstanding the fact that a parallel consent in the form of felling licence may also have to be applied for, any EIAR and/or NIS produced in connection with the application for planning permission to the Local Planning Authority or An Bord Pleanála should include an assessment of the impact of and measures, as appropriate, to prevent, mitigate or compensate for any significant adverse effects direct or indirect identified on the environment arising from such felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species.</i></p> <p><i>3. Please note that there must be absolute spatial consistency between the felling licence areas submitted to DAFM (second authority) and all related planning documents submitted to the first authority in respect of the felling area(s).</i></p>		
<b>Telecommunications</b>			
Vodafone	<p><b>Response received 23<sup>rd</sup> December 2021:</b> <i>Based on the coordinates provided for the proposed turbines I can confirm there will be no impact to our Network.</i></p> <p><b>Response received 9<sup>th</sup> June 2023:</b> <i>Vodafone does not have any transmission in the area.</i></p>	No impact on the design.	12
Broadcasting Authority of Ireland	<p><b>Response received 22<sup>nd</sup> December 2021:</b> <i>'The BAI does not perform an in-depth analysis of the effect of wind turbines on FM networks. However, we are not aware of any issues from existing windfarms into existing FM networks. Also, the proposed windfarms are not located close to any existing or planned FM transmission sites'.</i></p> <p><b>Response received 8<sup>th</sup> June 2023:</b> <i>Coimisiún na Meán does not perform an in-depth analysis of the effect of wind turbines or electrical sub stations on FM networks. However, we are not aware of any issues from existing windfarms or electrical sub stations into existing FM networks. Also, the proposed sub station is not located close to any existing or planned FM transmission sites.</i></p>	No impact on the design.	12
Eir	<p><b>Response received 25<sup>th</sup> February 2022:</b> <i>We have no transmission services within the search area that will be affected.</i></p> <p><b>Response received 12<sup>th</sup> June 2024:</b> <i>We have no transmission links within the proposed area and it has no risk to the network.</i></p> <p><b>Response 15/04/24:</b> <i>We have no issue with these changes on the EirMobile and Eir fixed network.</i></p>	No impact on the design.	12
ESB Telecoms Ltd	No response received.	No impact on the design.	

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
RTE	<p><b>Response received 7<sup>th</sup> January 2022:</b> The turbine locations have not changed since the initial scoping, so Turbine 6 is sufficiently far away from our nearest path for it not to cause an issue.</p> <p>We would ask that a Protocol be signed between the Developer and 2rn should the site go ahead.</p> <p><b>Response of 9<sup>th</sup> June 2023:</b> The new turbine locations make no difference to our earlier assessment, we have no fixed linking nearby but would request that a protocol be signed should the site go ahead.</p> <p><b>Response received 5<sup>th</sup> April 2024:</b> If the turbine locations, particularly T6 have not changed, we have no objections to the proposed site. We would only ask that a protocol be signed between the developer and 2RN should the site go ahead.</p>	No impact on the design. A protocol will be signed upon receiving planning permission for the Proposed Development.	12
Virgin Media Television	<p><b>Response received 22<sup>nd</sup> December 2021:</b> I refer to your query of 22nd December about the above location. Virgin Media does not have any record of underground services at this location as indicated by your drawing.</p> <p><b>Response of 13<sup>th</sup> June 2023:</b> Virgin Media does not have any record of underground services at this location as indicated by your drawing.</p>	No impact on the design.	12
Three Ireland	<p><b>Response received 17<sup>th</sup> June 2021:</b> I have reviewed the turbine locations at the proposed Gortloughra windfarm and 3Ireland have no microwave links that could potentially be affected.</p> <p><b>Response of 9th June 2023:</b> I've reviewed the new Turbine positions and they will have no impact on the Three Ireland Microwave Transmission network.</p> <p><b>Response 12/04/24:</b> no additional comments on the proposed development.</p>	No impact on the design.	12
<b>Aviation</b>			
Cork Airport	<p>No response received from Cork Airport. Dublin Airport were contacted regarding Cork Airport on 8<sup>th</sup> June 2023.</p> <p>Response received from Dublin Airport: Daa along with AirNav Ireland (formerly the Air Navigation Service Provider division of the IAA) are responsible for ensuring the flight surfaces around Cork Airport are safeguarded. This is carried out using (amongst other things) the safeguarding grid as depicted below which extends 30 nautical miles from the airport: I have indicated the approximate location of the proposed wind farm at Gortloughra on the screenshot above just inside the 30nm limit. At this location the grid indicates that an obstacle greater than 600m elevation AMSL will need a formal assessment.</p> <p>The obstacle elevation AMSL is the existing ground/site elevation and the proposed obstacle height combined. With an approximate land elevation of 270m at the site location, the height of the proposed turbines in this instance will be approximately 445m (175m + 270m), which is well below the 600m safeguarding value and so an Instrument Flight Procedures Assessment will not be required.</p> <p>Separately, there are regulatory requirements that any obstacles greater than 100m above the existing ground elevation:</p> <ul style="list-style-type: none"> <li>• Must be notified to <a href="mailto:airspace@iaa.ie">airspace@iaa.ie</a>, and</li> <li>• A navigation warning light will be required</li> </ul>	No impact on the design.	12
Irish Aviation Authority	<p><b>Response received 6<sup>th</sup> January 2022:</b> The Irish Aviation Authority (IAA) Air Navigation Services Division (ANSD) does not get involved in the planning process. The IAA ANSD is to be notified as detailed hereafter:</p> <p>According to S.I. 215 of 2005, Irish Aviation Authority (Obstacles to Aircraft in Flight), the IAA ANSD requires any person who seeks to erect a manmade object to notify the aerodrome operator of the intended operation <b>at least thirty days</b> in advance if the structure is to be erected in the vicinity of the aerodrome or the areas around the aerodrome and other protected surfaces associated with the aerodrome. Aerodrome Operators can be contacted via IAA AIP AD 1.3 INDEX TO AERODROMES AND HELIPORTS, to evaluate the impact of the intended operation on the protected airspace established for the aerodrome.</p> <p>Additionally, any person who seeks to erect a manmade object in excess of 45 metres anywhere within the state above ground or water surface level must also notify the IAA ANSD of the intended crane erection <b>at least thirty days</b> in advance,</p>	No impact on the design.	12



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed																						
	<p>as a crane operating at or above this height may constitute an obstacle to air navigation. The IAA ANSD can be contacted via <a href="mailto:airspace@iaa.ie">airspace@iaa.ie</a>.</p> <p>The State requires electronic terrain and obstacle data (eTOD) in accordance with International Civil Aviation Organisation (ICAO) Annex 15 requirements which shall be surveyed by Ordnance Survey Ireland (OSi). The cost of this OSi surveyed data is to be borne by the developer. Additionally, the following data is to be supplied once construction is planned or commenced or available to the airspace team via <a href="mailto:airspace@iaa.ie">airspace@iaa.ie</a>:</p> <ul style="list-style-type: none"><li>• The WGS84 coordinates (In degrees, minutes and seconds) for each turbine?</li><li>• Height above ground level (to blade tip) and elevation above mean sea level (to blade tip)?</li><li>• Verification if it's a standalone wind farm or is merged with others. Does the wind farm have any alternative names?</li><li>• Horizontal extent (rotor diameter) of turbines and blade length where applicable?</li><li>• Lighting of the wind farm, which turbine(s) is/are lit, and what type of lighting?</li></ul> <table><tr><th>ICAO Light Type</th><th>Colour</th></tr><tr><td>Low-intensity Type A (fixed obstacle)</td><td>Red</td></tr><tr><td>Low-intensity Type B (fixed obstacle)</td><td>Red</td></tr><tr><td>Low-intensity Type C (mobile obstacle)</td><td>Yellow/Blue</td></tr><tr><td>Low-intensity Type D (follow-me vehicle)</td><td>Yellow</td></tr><tr><td>Low-intensity Type E</td><td>Red</td></tr><tr><td>Medium-intensity Type A</td><td>White</td></tr><tr><td>Medium-intensity Type B</td><td>Red</td></tr><tr><td>Medium-intensity Type C</td><td>Red</td></tr><tr><td>High-intensity Type A</td><td>White</td></tr><tr><td>High-intensity Type B</td><td>White</td></tr></table> <p><b>Response of 17<sup>th</sup> January 2022:</b> The development appears to be approximately 50km West of Cork Airport and 48km South East of Kerry Airport, as such, it is likely that the following general observations would be proffered during a formal planning process: In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to: (1) agree an aeronautical obstacle warning light scheme for the wind farm development, (2) provide as-constructed coordinates in WGS84 format together with ground and blade tip height elevations at each wind turbine location and (3) notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection.</p> <p><b>Response received 23<sup>rd</sup> December 2022:</b> It is understood that the proposal relates to 9 x Wind Turbines with a blade tip height of 175ms above ground level.</p> <p>It is noted that the proposed wind farm is approximately 20kms North East of the nationally licenced Bantry Aerodrome. We would recommend that you engage with the Licensee of the aerodrome to make them aware of your proposal: Contact details are as per Ireland's Aeronautical Information Publication: Post: ROWA Pharmaceuticals Ltd, Newtown, Bantry, Co. Cork Phone: +353 27 50077 Phone: +353 86 8127336 Fax: +353 27 50417 Email: <a href="mailto:rowa@rowa-pharma.ie">rowa@rowa-pharma.ie</a></p> <p><a href="#">EMPower initially proposed a 9 turbine layout.*</a></p> <p><b>Response received 9<sup>th</sup> June 2023:</b> The Authority has no specific requirements in relation to the completion of the EIAR.</p> <p>Based on the preliminary information provided, should a formal planning application be submitted, the Irish Aviation Authority will likely offer the following general observations: "In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to: (1) agree an aeronautical obstacle warning light scheme for the wind turbine development, (2) provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location and (3) notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection." Following the separation of the Irish Aviation Authority and Air Navigation Ireland (the IAA ANSP) from the 30th April 2023, Air Navigation Ireland has responsibility for the maintenance and safeguarding of en route communications and navigation surveillance equipment in Ireland. Please forward the report for their review to: <a href="mailto:planning@airnav.ie">planning@airnav.ie</a></p>	ICAO Light Type	Colour	Low-intensity Type A (fixed obstacle)	Red	Low-intensity Type B (fixed obstacle)	Red	Low-intensity Type C (mobile obstacle)	Yellow/Blue	Low-intensity Type D (follow-me vehicle)	Yellow	Low-intensity Type E	Red	Medium-intensity Type A	White	Medium-intensity Type B	Red	Medium-intensity Type C	Red	High-intensity Type A	White	High-intensity Type B	White		
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	<p>Please be advised that Paul Mullins has left the Authority. Audrey and Geraldine have transferred to the new entity – Air Nav Ireland.</p> <p><b>Response 05/04/24:</b> The Authority has no observations on the proposed amendments or specific requirements for integration into the EIAR.</p> <p>Based on the preliminary information provided, should a formal planning application be submitted, the Irish Aviation Authority will likely offer the following general observations:</p> <p>"In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to: (1) agree an aeronautical obstacle warning light scheme for the wind turbine development, (2) provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location and (3) notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection."</p>		
Bantry Aerodrome	<b>Response received 3<sup>rd</sup> May 2022:</b> I have contacted the IAA and I have no comment to make on the proposed wind farm project.	No impact on the design.	12
Kerry Airport	No response received.	No impact on the design.	12
<b>Ecology</b>			
An Taisce	No response received.	No impact on the design.	
Bat Conservation Ireland	<p><b>Response received 19<sup>th</sup> October 2023:</b> Bat Conservation Ireland has limited administrative capacity and therefore do not comment on planning applications. Please ensure that all bat survey work are undertaken according to best survey practice according to NPWS Bat Survey &amp; Mitigation Guidelines and additional guidance documents available, some of which are listed below. McAney, K. (2006) A conservation plan for Irish vesper bats, Irish Wildlife Manual No. 20 National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland. Marnell, F., Kelleher, C. &amp; Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland (Version 1: Kelleher &amp; Marnell, 2006). Bat Conservation Trust (2023) Bats and artificial lighting in the UK: bats and the built environment series. Guidance Note 08/2019. BCT, London. Collins, J. (Editor) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition). Bat Conservation Trust, London CIEEM (2022) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. <a href="https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/">https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/</a>. EPA (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports. May 2022. EPA, Ireland.</p>	Biodiversity is fully assessed in the EIAR and has influenced the design (by avoidance where possible).	6
Birdwatch Ireland	No response received.	Ornithological studies carried out as part of this EIAR and has influenced the placement of turbines.	7
Irish Peatland Conservation Council	<p><b>Response received 22<sup>nd</sup> February 2022:</b> The proposed windfarm is situated within an area of high biodiversity, ANNEX I habitat and surrounded by designated sites. The risk to these from construction would put them at increased strain with disastrous consequences to the aquatic and terrestrial environment if there is a peat slide. The developers also need to assess the cumulative effects of windfarms, afforestation, peat extraction, drainage, overgrazing on the environment - specifically including the designated sites, carbon sequestration and also assess the implications of impacts on annexed species and biodiversity. It is IPCC's understanding that the peat soils will still be drained while the turbine (hardstands) are being constructed and operational. What will be the impact of this on the Water Framework Directive and carbon storage compared to straight restoration of the habitat, such as forestry removal and drain blocking? Taking into account that the peatland, once restored, would last for 1000s of years (sequestering carbon and providing refugia for biodiversity) and that off-shore windfarms are being planned, is it appropriate to fragment and destroy one of the rarest habitats in Europe even more than it is at present?</p> <p>There are concerns, due to the results of a study done by BirdWatch Ireland relating to the sensitivity of certain species to windfarm developments, that disturbance from turbines may displace and dissuade species such as the Red Grouse and the Barn Owl from inhabiting this site. This would negate the point of providing areas of conservation in the first place. As the amount of blanket bog in County Cork has been reduced to 13% of the original resource of blanket bog, a globally unique habitat, and as the amount of wetlands in Europe have been lost to less than 10% (BOGLAND, EPA, 2011), it is imperative that they are protected from development or Ireland will not recover from the Climate and Biodiversity Emergency. The carbon cost of this project needs to also be accounted for, and this has to also include the other habitat degrading activities such as forestry, peat extraction and fragmentation (roads/cabling etc, already present and proposed</p>	<p>Biodiversity is fully assessed in the EIAR and has influenced the design (by avoidance where possible).</p> <p>Ornithological studies carried out as part of this EIAR and has influenced the placement of turbines.</p> <p>Drainage design has been influenced by current baseline</p>	6,7, 8, 9

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	as part of this project) over the lifespan of the project. Any future plans to upgrade the turbines also needs to be a feature of this proposal, along with the proposed impacts.	conditions and run off rates of the Proposed Development.	
Irish Wildlife Trust	No response received.	No impact on the design.	6
<b>Soils and Water</b>			
Geological Survey Ireland	<p><b>Response received 18<sup>th</sup> January 2022:</b></p> <p><b>Geoheritage</b> A national inventory of geoheritage sites known as County Geological Sites (CGSs) is managed by the Geoheritage Programme of Geological Survey Ireland. CGSs, as adopted under the National Heritage Plan, include sites that are of national importance which have been selected as the very best examples for NHA (Natural Heritage Areas) designation. NHA designation will be completed in partnership with the National Parks and Wildlife Service (NPWS). CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer.</p> <p>The audit for Co. Cork commenced in 2021 and will run for a three-year period. However, in the interim, unaudited CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer. <b>Our records show that there are no CGSs in the immediate vicinity of the proposed wind farm. We note that you have included reference to the 'Pass of Keimaneigh' County Geological Site. This is currently unaudited, and as such has no mapped site boundaries. This should be audited during 2022 and our data should be reviewed on an ongoing basis throughout the EIAR process.</b></p> <p><b>Groundwater</b> Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems. Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer, which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.</p> <p>The Groundwater Resources (Aquifers) data viewer indicates the area of the proposed wind farm is predominantly underlain by both a '<b>Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones</b>' and a 'Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones' underlies the margins. The Groundwater Vulnerability map indicates '<b>High</b>' and '<b>Extreme</b>' groundwater vulnerability within the area covered. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability in your assessments, as any groundwater-surface water interactions that might occur would be greater in these areas.</p> <p>The Groundwater Protection Response overview and link to the main report is here: <a href="https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx">https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx</a></p> <p><b>Geological Mapping</b> Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.</p> <p><b>Geotechnical Database Resources</b> Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.</p> <p><b>Geohazards</b> Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.</p>	Soils, Geology, Hydrology and Hydrogeology have influenced the design of the Proposed Development. Mitigation by design/avoidance was integral to the Project.	8, 9



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	<p>Landslides are common in areas of peat, rock near surface and in fine to coarse range materials (such as glacial tills), areas which are found within the proposed wind farm area. Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.</p> <p>Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.</p> <p><b>Natural Resources (Minerals/Aggregates)</b></p> <p>Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process.</p> <p>We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach, we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed Gortloughra Wind Farm are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.</p> <p><b>Other Comments</b></p> <p>Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.</p> <p>The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to Geological Mapping Unit, at GeologicalMappingInfo@gsi.ie, 01-678 2795.</p> <p><b>Response received 13<sup>th</sup> June 2023:</b></p> <p>With reference to your email dated 09 June 2023, regarding the Gortloughra Wind Farm, Dunmanway, Co Cork – Scoping Request Update, please note that Geological Survey Ireland has no specific comment or observations to make on this matter at this time since our last response 21/481.</p> <p><b>Response received 16<sup>th</sup> April 2024:</b></p> <p>With reference to your email on April 4, 2024, regarding the Updated Scoping Request for Gortloughra Wind Farm, Co Cork, please note that Geological Survey Ireland have no comments or observations to make since our previous response 21/481.</p>		
Inland Fisheries Ireland (IFI)	<p><b>Response received 6<sup>th</sup> January 2022:</b></p> <p>The site of the proposed development appears to encompass the upper Bandon, Owvane and Bealaphadeen Rivers and their tributaries, significant salmonid fisheries. In this context IFI would ask that the following requirements should be taken into consideration.</p> <p>There should be no drainage or other physical interference with the bed or bank of any watercourse without prior consultation with IFI.</p> <p>Suspended solids and or hydrocarbon contaminated site run-off waters must be controlled adequately so that no pollution of surface waters can occur. More specifically IFI feels the following issues should be addressed</p> <ol style="list-style-type: none"> <li>Identifying and zoning the project for environmental impact should a peat slip occur</li> <li>Setting out contingency plan should a peat movement occur.</li> <li>Setting out a plan for the control of silt in such a scenario, including measures to be put in place at the initial stages of construction.</li> </ol> <p>In the event of any watercourse crossings being bridged or culverted the following general criteria should apply,</p> <ol style="list-style-type: none"> <li>The free passage of fish must not be obstructed.</li> <li>The original slope of the river bed should be maintained with no sudden drops on the downstream side. Design details on any proposed crossing should be incorporated at planning stage</li> <li>Bridges are preferable to culverts.</li> <li>All instream works should be carried out only in the May-September period.</li> </ol> <p>IFI would ask that the scoping study should include an electrofishing survey of a watercourse on which it is proposed to construct a crossing.</p>	Biodiversity, Soils, Geology, Hydrology and Hydrogeology have influenced the design of the Proposed Development. Mitigation by design/avoidance was integral to the Project.	6, 9

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	<p><i>IFI would ask that you revert when further information and design detail is available.</i></p> <p><b>Response received 26<sup>th</sup> June 2024:</b>  <i>The only real change from our previous letter is that instream works should be limited to the period <u>July</u> to September inclusive.</i></p> <p><b>Response received 7<sup>th</sup> August 2024:</b>  <i>.... More specifically the following should apply</i></p> <ol style="list-style-type: none"> <li><i>1. Instream works should be limited to the period July to September inclusive.</i></li> <li><i>2. All necessary measure should be taken to prevent the entry of polluting matter to waters.</i></li> <li><i>3. It is desirable that the works should be undertaken in the dry.</i></li> <li><i>4. The works should be designed and undertaken in a manner so as not to obstruct fish passage.</i></li> </ol> <p><i>If you revert when specifics and a method statement are available for any instream works we can discuss in more detail.</i></p>		
Irish Water (Now operating as Uisce Éireann)	<p><b>Response received 15<sup>th</sup> March 2022:</b>  <i>IW currently does not have the capacity to advise on scoping of individual projects. However, in general we would like the following aspects of Water Services to be considered in the scope of an EIAR where relevant;</i></p> <p><i>a) Where the development proposal has the potential to impact an IW Drinking Water Source(s) the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to IWs Drinking Water Source during construction and operational phases of the development. Hydrological/hydrogeological pathways between your site and receiving waters should be identified.</i></p> <p><i>b) Where the development proposal includes backfilling of materials, the waste sampling strategy for the proposed development to ensure the material is inert.</i></p> <p><i>c) Mitigation proposed for any potential negative impacts on any water source(s), in proximity including the environmental management plan and incident response.</i></p> <p><i>d) Any and all potential impacts on the nearby reservoir as public water supply water source(s) is assessed, including any impact on hydrogeology and any groundwater/ surface water interactions.</i></p> <p><i>e) Impacts of the development on the capacity of water services (do existing water services have the capacity to cater for the new development if required). This is confirmed by IW in the form of a Confirmation of Feasibility (COF). If a development will require a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to IW to determine the feasibility of connection to the Irish Water network. All pre-connection enquiry forms are available from <a href="https://www.water.ie/connections/get-connected/">https://www.water.ie/connections/get-connected/</a></i></p> <p><i>f) Any up grading of water services infrastructure that would be required to accommodate the development.</i></p> <p><i>g) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an IW collection network.</i></p> <p><i>h) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks &amp; potential measures to minimise/stop surface waters from combined sewers.</i></p> <p><i>i) Any physical impact on IW assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.</i></p> <p><i>j) If you are considering a development proposal, you are advised to determine the location of public water services assets, possible connection points from your site/lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of your intended development to <a href="mailto:datarequests@water.ie">datarequests@water.ie</a> Other indicators or methodologies for identifying infrastructure located within your lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.</i></p> <p><i>k) Any potential impacts on the assimilative capacity of receiving waters in relation to IW discharge outfalls including changes in dispersion /circulation characterises. Hydrological/hydrogeological pathways between your site and receiving waters should be identified.</i></p> <p><i>l) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant potential impact on the capacity of the source) or the potential of the development to influence/ present a risk to the quality of the water abstracted by IW for public supply.</i></p> <p><i>m) Where a development proposes to connect to an IW network and that network either abstracts water from or discharges wastewater “p”/ v, consideration as to whether the integrity of the site/conservation objectives of the site would be compromised.</i></p> <p><i>n) Mitigation measures in relation to any of the above ensuring a zero risk to any IW drinking water sources (Surface and Ground water).</i></p> <p><i>This is not an exhaustive list.</i></p>	No known Uisce Éireann infrastructure at time of planning so no impact on the design.	9

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	<p><i>Please note;</i></p> <ul style="list-style-type: none"> <li>Where connection(s) to the public network is required as part of your development proposal, applicants are advised to complete the Pre-Connection Enquiry process and have received a Confirmation of feasibility letter from Irish Water ahead of any planning application.</li> <li>Irish Water will not accept new surface water discharges to combined sewer networks</li> </ul> <p>A similar response was received 22<sup>nd</sup> June 2023 and 10<sup>th</sup> May 2024.</p> <p><b>Response received 10<sup>th</sup> May 2024:</b></p> <p>At present, Uisce Éireann does not have the capacity to advise on the scoping of individual projects. However, in general the following aspects of Water Services should be considered in the scope of an EIA where relevant;</p> <p>a) Where the development proposal has the potential to impact an Uisce Éireann Drinking Water Source(s), the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to Uisce Éireann's Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified as part of the report.</p> <p>b) Where the development proposes the backfilling of materials, the applicant is required to include a waste sampling strategy to ensure the material is inert.</p> <p>c) Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity and included in the environmental management plan and incident response.</p> <p>d) Any and all potential impacts on the nearby reservoir as public water supply water source(s) are assessed, including any impact on hydrogeology and any groundwater/ surface water interactions.</p> <p>e) Impacts of the development on the capacity of water services (<i>i.e. do existing water services have the capacity to cater for the new development</i>). This is confirmed by Uisce Éireann in the form of a Confirmation of Feasibility (COF). If a development requires a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to Uisce Éireann to determine the feasibility of connection to the Irish Water network. All pre-connection enquiry forms are available from <a href="https://www.water.ie/connections/connection-steps/">https://www.water.ie/connections/connection-steps/</a>.</p> <p>f) The applicant shall identify any upgrading of water services infrastructure that would be required to accommodate the proposed development.</p> <p>g) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an Uisce Éireann collection network.</p> <p>h) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks and potential measures to minimise and or / stop surface waters from combined sewers.</p> <p>i) Any physical impact on Uisce Éireann assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.</p> <p>j) When considering a development proposal, the applicant is advised to determine the location of public water services assets, possible connection points from the applicant's site / lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre-planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of the applicant's intended development to <a href="mailto:datarequests@water.ie">datarequests@water.ie</a></p> <p>k) Other indicators or methodologies for identifying infrastructure located within the applicant's lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.</p> <p>l) Any potential impacts on the assimilative capacity of receiving waters in relation to Uisce Éireann discharge outfalls including changes in dispersion / circulation characterises. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified within the report.</p> <p>m) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (<i>and resultant potential impact on the capacity of the source</i>) or the potential of the development to influence / present a risk to the quality of the water abstracted by Uisce Éireann for public supply should be identified within the report.</p> <p>n) Where a development proposes to connect to an Uisce Éireann network and that network either abstracts water from or discharges wastewater to a "protected"/ sensitive area, consideration as to whether the integrity of the site / conservation objectives of the site would be compromised should be identified within the report.</p>		



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>o) Mitigation measures in relation to any of the above ensuring a zero risk to any Irish Water drinking water sources (Surface and Ground water).</p> <p><i>This is not an exhaustive list.</i></p> <p><b>Please note;</b></p> <ul style="list-style-type: none"> <li>Where connection(s) to the public network is required as part of the development proposal, applicants are advised to complete the Pre-Connection Enquiry process and have received a Confirmation of Feasibility letter from Uisce Éireann ahead of any planning application.</li> <li>Uisce Éireann will not accept new surface water discharges to combined sewer networks.</li> </ul>		
IAH Group	<p><b>Response received 15<sup>th</sup> February 2022:</b></p> <p>IAH (Irish Group) do not comment on any planning submissions.</p>	No impact on the design.	9
<b>Other</b>			
Health Service Executive	<p><b>Response received 5<sup>th</sup> January 2022:</b></p> <p>Further to my email of the 31st December 2021 please find attached two documents from HSE South Emergency Management regarding Gortloughra Wind Farm. A copy of these documents has not been posted however if you do require a copy in the post please contact me.</p> <p>Please be advised that the HSE South Emergency Management function does not have any specific observations to make with respect to this application. However, please note the following recommendations within the context of site operations: Should an incident occur at the site and the site operator requires the assistance of the emergency services, the incident information should be provided in the 'ETHANE' format (please see attached).</p> <p>Emergency Services access to the site should be clearly identified. This should be undertaken via appropriate high visibility signage, i.e; a green sign with a yellow border and white lettering citing the abbreviation RVP. The site should have a mechanism in place to account for personnel during an evacuation in order to provide the responding emergency services with an estimate of the number of people accounted and unaccounted for.</p> <p>The site should identify any critical / vulnerable facilities within the geographical catchment area, such as hospitals, schools, nursing homes, etc, that could be directly or indirectly affected by an incident at the site. Where the 'off-site' impacts of an incident at the site affects a vulnerable cohort / population such as children within crèches, schools; patients / clients / residents within nursing homes, etc; the emergency services will require assistance from the site operator in determining the impact on the local community.</p> <p>The site operator is encouraged to develop a business continuity plan that includes a plan for severe weather. For more advice on this, please see the Department of Business, Enterprise and Innovation, Business Continuity Planning in Severe Weather. <a href="https://dbej.gov.ie/en/Publications/Publication-files/Business-Continuity-Planning-in-Severe-Weather-Check-List-for-Businesses.pdf">https://dbej.gov.ie/en/Publications/Publication-files/Business-Continuity-Planning-in-Severe-Weather-Check-List-for-Businesses.pdf</a></p> <p>All correspondence or any queries with regard to this report should be forwarded to Ms. Maryanne Horgan, Emergency Management Office, HSE South, Eye, Ear and Throat Hospital, Western Road, Cork, T12 WP62 or <a href="mailto:maryanne.horgan@hse.ie">maryanne.horgan@hse.ie</a></p> <p>General Introduction</p> <p>The following documents should be taken into consideration when preparing the Environmental Impact Assessment Report:</p> <ul style="list-style-type: none"> <li>Guidelines on the information to be contained in EIS (2002), 187kb</li> <li>Advice Notes on Current Practice in the preparation of EIS (2003), 435kb</li> <li>Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment <a href="https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanala_on_carrying_out_eia_-_august_2018.pdf">https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanala_on_carrying_out_eia_-_august_2018.pdf</a></li> </ul> <p>EU publication: Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report, EU, 2017  <a href="http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf">http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf</a></p> <p>Adoption of the Directive (2014/52/EU) in April 2014 initiated a review of the above guidelines. The draft new guidelines can be seen at:  <a href="http://www.epa.ie/pubs/consultation/reviewofdrafteisguidelinesadvisenotes">http://www.epa.ie/pubs/consultation/reviewofdrafteisguidelinesadvisenotes</a></p> <p>The applicant should also consider the findings of the High Court judgement issued in the judicial review of the Derryadd Wind Farm. (2021 IEHC 390 [2020] No. 557 JR] P. Sweetman v An Bord Pleanála). Generally, the Environmental Impact Assessment should examine all likely significant impacts and provide the following information for each:</p> <ol style="list-style-type: none"> <li>Description of the receiving environment;</li> <li>The nature and scale of the impact;</li> </ol>	<p>The below has been assessed in this EIAR:</p> <ul style="list-style-type: none"> <li>Public Consultation</li> <li>Decommissioning phase</li> <li>Siting and location of turbines</li> <li>Opportunity for Health Gain</li> <li>Noise &amp; Vibration</li> <li>Shadow Flicker</li> <li>Air Quality</li> <li>Surface and Groundwater Quality</li> <li>Geological Impacts</li> <li>Ancillary facilities</li> <li>Cumulative impacts</li> </ul>	2, 3, 4, 5, 8, 9, 10, 12, 16, 17

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>c) An assessment of the significance of the impact;</p> <p>d) Proposed mitigation measures;</p> <p>e) Residual impacts.</p> <p>Directive 2014/52/EU has an enhanced requirement to assess likely significant impacts on Population and Human Health. It is the experience of the Environmental Health Service (EHS) that impacts on human health are often inadequately assessed in EIAs in Ireland. It is recommended that the wider determinants of health and wellbeing are considered in a proportionate manner when considering the EIA. Guidance on wider determinants of health can be found at <a href="http://www.publichealth.ie">www.publichealth.ie</a></p> <p>In addition to any likely significant negative impacts from the proposed development, any positive likely significant impacts should also be assessed.</p> <p>The HSE will consider the final EIAR accompanying the planning application and will make comments to An Bord Pleanála on the methodology used for assessing the likely significant impacts and the evaluation criteria used in assessing the significance of the impact.</p> <p>This report only comments on Environmental Health Impacts of the proposed development. It is based on an assessment of the correspondence submitted to this office dated 21 December 2021.</p> <p>The Environmental Health Service (EHS) recommends that the following matters are included and assessed in the EIAR</p> <ul style="list-style-type: none"> <li>• Public Consultation</li> <li>• Decommissioning phase</li> <li>• Siting and location of turbines</li> <li>• Opportunity for Health Gain</li> <li>• Noise &amp; Vibration</li> <li>• Shadow Flicker</li> <li>• Air Quality</li> <li>• Surface and Groundwater Quality</li> <li>• Geological Impacts</li> <li>• Ancillary facilities</li> <li>• Cumulative impacts</li> </ul> <p><b>Public Consultation</b></p> <p>It is strongly recommended that early and meaningful public consultation with the local community should be carried out to ensure all potentially significant impacts have been adequately addressed. It is noted in Chapter 15.2 (Study Area) of the Scoping Report that there are 57 properties located within 2km of the proposed windfarm development. The EIAR should indicate how consultation was undertaken with the occupants of these properties.</p> <p>All parties affected by the proposed development, including those who may benefit financially from the project, must be fully informed of what the proposal entails, especially with regard to potential impacts on surrounding areas. Sensitive receptors and other stakeholders should be identified to ensure all necessary and appropriate mitigation measures are put in place to avoid any complaints about the proposed wind farm development in the future.</p> <p>It is acknowledged that restrictions around public gatherings as a result of Covid 19 prevention measures may impact on opportunities for public consultation events. However, it is expected that meaningful public consultation, where the local community is fully informed of the proposed development, will be undertaken. Members of the public should be given sufficient opportunities to express their views on the proposal wind farm.</p> <p>The Environmental Impact Assessment Report (EIAR) should clearly demonstrate the link between public consultations and how those consultations have influenced the decision-making process in the EIA.</p> <p>To assist with the consultation and planning process it is recommended that the applicant develops a dedicated website for the proposed wind energy project. All correspondence, maps, project updates and documentation including the EIAR should be uploaded to this site.</p> <p><b>Decommissioning Phase</b></p> <p>The proposed operational lifetime of the wind farm should be indicated in the EIAR. The EIAR should detail what the eventual fate of the turbines and associated material will be, i.e. will the material be recycled or how will it be disposed of. Information should also be provided regarding the proposed methodology to be used for the disposal of the materials forming the foundations of the wind turbines.</p> <p>The EIAR should indicate the proposed future use of the wind farm site at the end of the planning permission period.</p> <p>Siting, Location and details of Turbines</p>		

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	<p><i>The EIAR should include a map and a description of the proposed location of each of the proposed wind turbines within the 198-hectare site. Indicative Turbine Co-ordinates are included in Table 5.1 of the Scoping Report. Any variance from these locations should be described in the EIAR.</i></p> <p><i>The Environmental Health Service expects that details (height and model) of the turbines to be installed will be available at the time planning permission is sought and will be included in the EIAR. Details of turbine foundation structures, including depth, quantity and material to be used should be included in the EIAR.</i></p> <p><i>Opportunity for Health Gain</i>  <i>The EPA has issued guidance with regard to meeting the requirements of Directive 2014/52/EU which assesses the impact of certain public and private projects on the environment. The proposed development should be assessed with a view to the potential to include opportunities for health gain within the site of the proposed wind farm by including greenways, cycle-paths or walking trails within the development site.</i></p> <p><i>Assessment of Consideration of Alternatives</i>  <i>The EIAR should consider an assessment of alternatives. It is noted that 'Alternatives Considered' will be assessed in Chapter 3 of the EIAR. The EHS recommends that alternative renewable energy options to onshore wind farms should be assessed as part of the EIAR.</i></p> <p><i>Noise &amp; Vibration</i>  <i>The potential impacts for noise and vibration from the proposed development on all noise sensitive locations must be clearly identified in the EIAR. Impacts during both the proposed construction phase and the operational phase should be addressed. The EIAR must also consider the appropriateness and effectiveness of all proposed mitigation measures to minimise noise and vibration.</i></p> <p><i>A baseline noise monitoring survey should be undertaken to establish the existing background noise levels. Noise from any existing turbines in the area should not be included as part of the background levels.</i>  <i>In addition, an assessment of the predicted noise impacts during the construction phase and the operational phase of the proposed wind farm development must be undertaken which details the change in the noise environment resulting from the proposed wind farm development.</i></p> <p><i>The Draft Revised Wind Energy Development Guidelines were published in December 2019. Whilst these have yet to be adopted, any proposed wind farm development should have consideration of the draft Guidelines.</i>  <a href="https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft_revised_wind_energy_development_guidelines_december_2019.pdf">https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft_revised_wind_energy_development_guidelines_december_2019.pdf</a></p> <p><i>Shadow Flicker</i>  <i>It is recommended that a shadow flicker assessment is undertaken to identify any dwellings and sensitive receptors which may be impacted by shadow flicker. The assessment must include all proposed mitigation measures. Dwellings should include all occupied properties and any existing or proposed properties for which planning consent has been granted for construction or refurbishment.</i></p> <p><i>It is recommended that turbine selection will be based on the most advanced available technology that permits shut down during times when residents are exposed to shadow flicker. As a result no dwelling should be exposed to shadow flicker.</i></p> <p><i>Air Quality</i>  <i>Due to the nature of the proposed construction works generation of airborne dust has the potential to have significant impacts on sensitive receptors. A Construction Environmental Management Plan (CEMP) should be included in the EIAR which details dust control and mitigation measures. Measures should include:</i> <ul style="list-style-type: none"> <li><i>Sweeping of hard road surfaces</i></li> <li><i>Provision of a water bowser on site, regular spraying of haul roads</i></li> <li><i>Wheel washing facilities at site exit</i></li> <li><i>Restrict speed on site</i></li> <li><i>Provide covers to all delivery trucks to minimise dust generation</i></li> <li><i>Inspect and clean public roads in the vicinity if necessary</i></li> <li><i>Material stockpiling provided with adequate protection from the wind</i></li> <li><i>Dust monitoring at the site boundary</i></li> <li><i>Truck inspection and maintenance plan</i></li> <li><i>Details of a road maintenance agreement between the wind farm operator and the Local Roads Authority to clarify responsibility for the upkeep and repair of access roads during the construction phase of the project.</i></li> </ul> </p> <p><i>Surface and Ground Water Quality</i>  <i>The proposed development has the potential to have a significant impact on the quality of both surface and ground water. All drinking water sources, both surface and ground water, must be identified. Public and Group Water Scheme sources and supplies should be identified. Measures to ensure that all sources and supplies are protected should be described.</i></p>		

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	<p>The Environmental Health Service recommends that a walk over survey of the site is undertaken in addition to a desktop analysis of Geological Survey of Ireland data in order to identify the location of private wells used for drinking water purposes.</p> <p>Any potential significant impacts to drinking water sources should be assessed. Details of bedrock, overburden, vulnerability, groundwater flows, aquifers and catchment areas should be considered when assessing potential impacts and any proposed mitigation measures.</p> <p><b>Geological impacts</b> A detailed assessment of the current ground stability of the site for the proposed wind farm extension and all proposed mitigation measures should be detailed in the EIAR. The assessment should include the impact construction work may have on the future stability of ground conditions, taking into consideration extreme weather events, site drainage and the potential for soil erosion.</p> <p>Reference is made to a peat slide which occurred near Ballybofey in Co. Donegal on November 13<sup>th</sup>, 2020, which may have been linked to construction activity at Meenbog Wind Farm. Potential impacts on water supply associated with contamination following a peat slide include sedimentation and alteration of pH levels.</p> <p>The Environmental Health Service recommends that a detailed Peat Stability Assessment should be undertaken to assess the suitability of the soil for the proposed development. The EIAR should include provision for a peat stability monitoring programme to identify early signs of potential bog slides ('pre-failure indicators' see the Scottish Government's 'Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Developments 2017') <a href="https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2017/04/peat-landslide-hazard-risk-assessments-best-practice-guide-proposed-electricity/documents/00517176-pdf/00517176-pdf/govscot%3Adocument/00517176.pdf">https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2017/04/peat-landslide-hazard-risk-assessments-best-practice-guide-proposed-electricity/documents/00517176-pdf/00517176-pdf/govscot%3Adocument/00517176.pdf</a></p> <p><b>Ancillary Facilities</b> The EIAR should include details of the location of all site office, construction compound, fuel storage depot, sanitary accommodation and canteen, First Aid facilities, disposal of wastewater and the provision of a potable water supply to the site canteen.</p> <p><b>Cumulative Impacts</b> Table 3.2: 'Wind Farms within 20km of the Development' of the Scoping Report indicates that there are a number of existing and proposed wind farms within the vicinity of the proposed development. All existing or proposed wind farm developments in the vicinity should be clearly identified in the EIAR.</p> <p>The impact on sensitive receptors of the proposed development combined with other wind farm developments in the vicinity should be considered. The EIAR should include a detailed assessment of any likely significant cumulative impacts of the proposed renewable energy development.</p> <p>The EIAR should state clearly if there is any future proposal to further extend the proposed Gortloughra Wind Farm.</p>		
Department of Transport	<p><b>Response received 13<sup>th</sup> January 2022:</b> It is noted by the Department of Transport that Section 9 of the Scoping Document is entitled: ACCESS, TRAFFIC AND TRANSPORT</p> <p>At section 9.3 the study area is defined as the haul route to the site for both turbine components, likely to be from Port of Cork and the local roads leading to the site which will be used for delivery of stone, concrete and other building materials during construction.</p> <p>The scope does not appear to include for the potential effects of the provision of connection cables to the national grid which is essential to the development as the cable route(s) do not appear to be included in the study area. It should be noted that the Department considers the construction involved in providing these connection cables may have effects on both the environment and the Regional and Local Road network.</p> <p>Where the developer proposes the placement of any cables (or additional cables) in one or more trenches within the extents of the (regional and local) public road network, it is necessary to consider the following:</p> <ul style="list-style-type: none"> <li>• Their presence within the public road could significantly restrict the Road Authority in carrying out its function to construct and maintain the public road and will likely add to the costs of those works.</li> <li>• Their installation within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure and the subgrade may be poor or poorly drained) the design needs to take account of all the variable conditions and not be based on a sample of the general conditions.</li> <li>• The possible effect on the remaining available road space (noting that there may be need to accommodate other utilities within the road cross-section in the future).</li> <li>• The necessity to have the power in the cables switched off where the Road Authority considers this necessary in order to carry out its function to construct and maintain the public road.</li> </ul>	All items considered in the design of access to Site.	14



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>The Department of Transport considers it important that the examination of the proposal should include consideration of the following:</p> <ul style="list-style-type: none"> <li>• Examination of options other than the routing of cables along the public road,</li> <li>• Examination of options for connection to the national grid network at a point closer to the wind farm in order to reduce the adverse impact on public roads.</li> <li>• Details of where within the road cross section cables are to be placed so as to minimise the effect on the Roads Authority in its role of construction and maintenance,</li> <li>• Examination of details of any chambers proposed within the public road cross section so as to minimise the effect on the Roads Authority in its role of construction and maintenance and,</li> <li>• Rationalisation of the number of cables involved (including existing electric or possible future cables) and their diversion into one trench, in order to minimise the impacts on the road network and the environment along the road boundary (hedgerows).</li> </ul> <p>The Department considers the following should be considered when applying conditions to any approval.</p> <ol style="list-style-type: none"> <li>1. A condition requiring the specific approval of the local authority to the detail of the final route of cables through the public road space. If during construction there is a need to deviate from the detailed design then the approval of the local authority would again be sought. This would assist in minimising the impact on the public road.</li> <li>2. A condition requiring the developer to comply with all appropriate standards and, inter alia the Guidelines for Managing Openings in Public Roads, 2017 in order to ensure orderly development.</li> <li>3. A condition requiring that the location of the cables would be recorded as exactly as possible (maybe using BIM type technology) so as to facilitate the further use of road space for utilities and the maintenance/construction of the public road by the Roads authority. This record should be lodged with the local authority and with the ESB Networks for retention on their records.</li> <li>4. A condition requiring the developer to route cables away from bridge structures and specifically preventing the developer from attaching cables to road bridges. This would allow for the future maintenance of bridges without interruption of the electricity supply along the cables.</li> <li>5. A condition requiring the developer to notify the Roads Authority of the owner of the cables (Owner) and the controller (Power Controller) of the power transmitted along the cables. In addition, the condition should require Owner and Power Controller to notify the Roads Authority of any change in ownership of the cables or change of Power Controller transmitting power along the cables. In all instances the Owner and Power Controller should be required to maintain an agreed contacts list with the Roads Authority.</li> </ol> <p><b>Response received 29<sup>th</sup> June 2023:</b> At this point in time the department has no revision to make to previous comments given.</p> <p><b>Response 17/04/24:</b> The Department of Transport makes the following comments on the consultation request relating to the Scoping Report for the proposed Gortloughra Wind Farm in Co. Cork.</p> <p>It should be noted that the Department considers the construction involved in providing this development and especially, the connection cables to the national grid may have effects on both the environment and the Regional and Local Road network.</p> <p>Where the developer proposes the placement of any cables (or additional cables) in one or more trenches within the extents of the (regional and local) public road network, it is necessary to consider the following:</p> <ul style="list-style-type: none"> <li>• Their presence within the public road will likely significantly restrict the Road Authority in carrying out its function to construct and maintain the public road and will likely add to the costs of those works.</li> <li>• Their installation within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure, and the subgrade may be poor or poorly drained) the design needs to take account of all the variable ground conditions and not be based on a sample of the general soil conditions.</li> <li>• The possible effect on the remaining available road space (noting that there may be need to accommodate other utilities within the road cross-section in the future).</li> <li>• The necessity to have the power in the cables switched off where the Road Authority considers this necessary in order to carry out its function to construct and maintain the public road.</li> </ul> <p>The Department consider it important that the examination of the proposal should include consideration of the following:</p> <ul style="list-style-type: none"> <li>• Examination of options other than the routing of cables along the public road,</li> <li>• Examination of options for connection to the national grid network at a point closer to the wind farm in order to reduce the adverse impact on public roads.</li> <li>• Details of where within the road cross section cables are to be placed so as to minimise the effect on the Roads Authority in its role of construction and maintenance,</li> </ul>		

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<ul style="list-style-type: none"> <li>Examination of details of any chambers proposed within the public road cross section so as to minimise the effect on the Roads Authority in its role of construction and maintenance,</li> <li>Elimination of jointing bays from beneath the road pavement to protect the integrity of the road structure for the safety of those driving on the public road by eliminating hard spots and also preserve the road width for other utilities,</li> <li>Prevention of the attachment of cables to all bridge structures and culverts by diverting them beneath or away from these structures and,</li> <li>Rationalisation of the number of cables involved (including existing electric or possible future cables) and their diversion into one trench, in order to minimise the impacts on the road network and the environment along the road boundary (hedgerows).</li> </ul> <p>The Department considers the following should be considered when applying conditions to any approval.</p> <ol style="list-style-type: none"> <li>A condition requiring the specific approval of the local authority to the detail of the final route of cables through the public road space. If during construction there is a need to deviate from the detailed design then the approval of the local authority would again be sought. This would assist in minimising the impact on the public road.</li> <li>A condition requiring the developer to comply with all appropriate standards and, inter alia the Guidelines for Managing Openings in Public Roads, 2017 in order to ensure orderly development.</li> <li>A condition requiring that the location of the cables would be recorded as exactly as possible (maybe using BIM type technology) so as to facilitate the further use of road space for utilities and the maintenance/construction of the public road by the Roads authority. This record should include as constructed surveys of all infrastructure altered, added, removed or relocated and exact detail of the road construction including any drains or other features encountered. The record should be lodged with the local authority and with the ESB Networks for retention on their records.</li> <li>A condition to require the elimination of jointing bays from under the road pavement to protect the integrity of the road structure, thereby improving safety for those driving on the public road by eliminating hard spots and preserving the road width for other utilities.</li> <li>A condition requiring the developer to route cables away from bridge structures and specifically preventing the developer from attaching cables to road bridges. This would allow for the future maintenance of bridges without interruption of the electricity supply along the cables.</li> <li>A condition requiring the replacement of culverts that have been excavated during the cable duct placement operation. The replacement culverts should be designed appropriately and include an allowance for the effects of climate change.</li> <li>A condition requiring the developer to notify the Roads Authority of the owner of the cables (Owner) and the controller (Power Controller) of the power transmitted along the cables. In addition, the condition should require Owner and Power Controller to notify the Roads Authority of any change in ownership of the cables or change of Power Controller transmitting power along the cables. In all instances the Owner and Power Controller should be required to maintain an agreed contacts list with the Roads Authority.</li> </ol>		
Department of Defence	<p>Response received February 2022</p> <p>Nothing in the above observations shall be taken as a binding response by the Minister for Defence in the event that a planning application is made. The Minister reserves the right to comment on an actual planning application as and when it is submitted in accordance with the provisions of the planning regulatory code.</p> <p><b>Response 17/04/24:</b></p> <p>Based on the information supplied and following consultations with the subject matter in the Irish Air Corps, the Department of Defence wishes to make the following observations:</p> <p>All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week. Obstacle lighting should be incandescent or, if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting used must emit light at the near InfraRed (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light.</p> <p>Any Irish Air Corps (IAC) requirements for are separate to Irish Aviation Authority (IAA) require.</p> <p>We would appreciate if you could keep us informed on any progress relating to this proposed development.</p>	All items included in the design of the wind farm.	12
Commission for Communications Regulation	No response received.	No impact on the design.	
Transport Infrastructure Ireland (TII)	<p><b>Response received 6<sup>th</sup> January 2022:</b></p> <p>TII will endeavour to consider and respond to planning applications referred to it, given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines as outlined in the Section 28 Ministerial Guidelines 'Spatial Planning and National</p>	All items considered in the design of access to Site.	14

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>Roads Guidelines for Planning Authorities' (DoECLG, 2012). Regard should also be had to other relevant guidance available at <a href="http://www.TII.ie">www.TII.ie</a>.</p> <p>The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals, following the examination of any valid planning application referred.</p> <p>National Strategic Outcome 2 of the National Planning Framework includes the objective to maintain the strategic capacity and safety of the national road network. It is also an investment priority of the National Development Plan, 2018 – 2027, to ensure that the extensive transport networks, which have been greatly enhanced over the last two decades, are maintained to a high level to ensure quality levels of service, accessibility and connectivity to transport users. This requirement is further reflected in the recent publication of the Draft National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012).</p> <p>With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the national road network.</p> <p>The developer/scheme promoter should have regard, inter alia, to the following:</p> <ul style="list-style-type: none"><li>• It appears that the proposed windfarm site accesses the local and regional road network prior to access to the national road network. Access to the road network shall be developed in accordance with official policy and road safety considerations, as outlined above. Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to the locations of existing and future national road schemes.</li><li>• TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in proximity to the proposed development.</li><li>• The developer should assess visual impacts from existing national roads.</li><li>• The developer should have regard to any EIAR/EIS and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should, in particular, have regard to any potential cumulative impacts.</li><li>• The developer, in preparing EIAR, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).</li><li>• The developer, in preparing EIAR, should have regard to TII's Environmental Assessment and Construction Guidelines, including the 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (National Roads Authority (NRA), 2006).</li><li>• The EIAR/EIS should consider the 'Environmental Noise Regulations 2006' (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see 'Guidelines for the Treatment of Noise and Vibration in National Road Schemes' (1st Rev., NRA, 2004)).</li><li>• It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site, with reference to impacts on the national road network and junctions of lower category roads with national roads.</li></ul> <p>In relation to national roads, TII's 'Traffic and Transport Assessment Guidelines' (2014) should be referred to in relation to proposed development, with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of TII's TTA Guidelines, which addresses requirements for sub-threshold TTA. Any improvements required to facilitate development should be identified. It will be the responsibility of the developer to pay for the costs of any improvements to national roads to facilitate the private development proposed, as TII will not be responsible for such costs.</p> <ul style="list-style-type: none"><li>• The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required.</li><li>• In the interests of maintaining the safety and standard of the national road network, the EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network.</li><li>• TII recommends that that applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed. Where abnormal 'weight' loads are proposed, separate structure approvals/permits and other licences may be required in connection with the proposed haul route and all structures on the haul route through all the relevant County Council administrative areas, should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal 'weight' load proposed.</li></ul> <p>The national road network is managed by a combination of Public Private Partnership (PPP) Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities, in association with TII. The applicant/developer should also consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul route traversed, to ascertain any operational requirements such as delivery timetabling, etc. and to ensure that the strategic function of the national road network is safeguarded. Additionally, any damage caused to the pavement on the existing national road network arising from any temporary works due to the turning movement of abnormal 'length' loads (e.g. tearing of the</p>		



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>surface course, etc.), shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.</p> <p>Designers should consult TII Publications to determine whether a Road Safety Audit is required for any of the temporary works proposed. Any recommendations should be incorporated into designs.</p> <p>Grid connection and cable routing proposals should be developed to safeguard proposed road schemes, as TII will not be responsible for costs associated with future relocation of cable routing, where proposals are catered for in an area of a proposed national road scheme. In that regard, consideration should be given to routing options, use of existing crossings, depth of cable laying, etc.</p> <p>In the context of the existing national road network, in accordance with the National Planning Framework National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the network. This requirement is further reflected in the National Development Plan, the recent publication of the Draft National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 'Spatial Planning and National Roads Guidelines for Planning Authorities'.</p> <p>There are around 99,000km of roads in Ireland. The national road network, which caters for strategic interurban travel, consists of approx. 5.4% of this. There is a critical requirement to ensure the strategic capacity and safety of this national road network is maintained and significant Government investment already made in the national road network is safeguarded.</p> <p>The provision of cabling along the national road network represents a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network and TII is of the opinion that grid connection cable routing should reflect the foregoing provisions of official policy. Therefore, TII advises that grid connection cable routing should seek to utilise the extensive existing local road network, or alternatives, as opposed to the strategic national road network, contrary to the provisions of official policy.</p> <p>Other consents or licences may be required from the road authority for any trenching or cabling proposals crossing the national road. The Authority requests referral of all proposals agreed and licensed between the road authority and the applicant, which affect the national road network.</p> <p>Cable routing should avoid all impacts to existing TII infrastructure, such as traffic counters, weather stations, etc. and works required to such infrastructure shall only be undertaken in consultation with and subject to the agreement of TII. Any costs attributable shall be borne by the applicant/developer. The developer should also be aware that separate approvals may be required for works traversing the national road network. Notwithstanding, any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practice.</p> <p>A similar response was received 23<sup>rd</sup> June 2023.</p> <p><b>Response 10/04/24:</b> TII has examined the material included with your correspondence and advises that TII's observations of the 23 June 2023 remain. A copy of this correspondence is attached for your reference.</p>		
Environmental Protection Agency (EPA)	<p><b>Response received 8<sup>th</sup> March 2022:</b> If the proposal is not activity that is licensable by the EPA (Industrial Emissions, Integrated Pollution Control, Waste Licence or Waste Water Licence) the Agency would not provide a Scoping Opinion (on the scope and level of detail of information to be contained in an Environmental Impact Assessment Report).</p>	N/A	N/A
Department of Housing, Local Government & Heritage/DAU (Development Applications Unit)	<p><b>Response received 16<sup>th</sup> February 2022:</b> The Department is not in a position to make specific comment on this particular referral at this time. No inference should be drawn from this that the Department is satisfied or otherwise with the proposed activity. The Department may submit observations/recommendations at a later stage in the process.</p> <p><b>Response received 14<sup>th</sup> September 2023:</b> <b>Nature Conservation</b> ...All aspects of wind farm project, including both the overall turbine and grid connection proposals, need to be assessed together in terms of both EIA/EIS and NIS/AA process to avoid project splitting aspects of the project within the assessment process...</p> <p>...in combination effects and cumulative impacts sections of the assessments regarding the potential effects of the wind farm project. When carried out by the competent authority, the appropriate assessment cannot have lacunae and must</p>	All items considered and assessed in this EIAR.	6, 7, 8, 9

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p>contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the project on European sites. The Department notes that the location map provided is for an area of peatland.</p> <p>Assessment should include an assessment of the loss of underlying peat within the development site as a cumulative loss of peat overall and should be assessed in terms of a carbon benefit analysis versus restoration to peatland habitats...</p> <p><u>White-tailed sea-eagle</u> The proposed wind-farm is within the range of the recently re-introduced white-tailed sea eagle, a species listed in Annex I of the EU Birds Directive (Council Directive 2009/147/EC). This species, which became extinct in Ireland over one hundred years ago, is now establishing itself in the wild after two phases of a reintroduction programme which released birds from Norway. This species is particularly susceptible to collision with wind turbine blades. In Norway, 39 white-tailed eagle deaths were recorded from such collisions at one large wind-farm (Smøla) between 2005-20101. Four deaths due to wind turbine collisions had been recorded in Ireland, representing 10% of total mortality between 2007 and 20142. Three fatalities were approx. 10-15 km to the north west of this proposed development (three at Sillahertane and Lettercannon-Coomagearlachy area wind-farms) with another at a windfarm further to the north (October 20223). Eagles, when soaring, may even be slightly attracted to fly within the rotor-swept zone of turbines4, “possibly induced by the extra wind energy created by the turbulence”5.</p> <p>Collision and mortality risk must be fully assessed for the project and it should be borne in mind that assessment cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt. Dahl et al (2013) conclude, regarding management implications, that their results suggest that it will be difficult to employ mitigation measures to decrease the white-tailed eagle collision hazard. They therefore emphasize the importance of conducting thorough pre-construction studies to identify wind-power plant locations with low densities of species vulnerable to collision.</p> <p>The reintroduction programme is now at a very critical phase, where the production of sufficient wild-bred eagles over the next few years will determine the survival of the population, and success of the project. Studies of reintroduced and recolonizing white-tailed eagles have emphasised the importance of controlling mortality in this current early stage of the reintroduction programme:</p> <p>“Differences in demographic rates of wild-bred and released birds suggest that in future reintroduction programmes steps to maximise the success and output of the earliest breeding attempts would help ensure the most rapid shift to a population composed largely of wildbred birds, which should then have a higher rate of increase.”6</p> <p>In terms of increasing the risk of collision the siting of turbines on locations on ridges above valleys where eagles are likely to use rising air currents to obtain ‘orographic lift’ to gain altitude7 would be an additional potential concern. It is not clear if turbine micro siting is in an area of higher ‘orographic lift’. it should be assessed as part of the overall assessment whether models, such as that in Hanssen et al. (2020), are applicable at this wind-farm in detecting microsite susceptibility to generating ‘orographic lift’ which may attract eagles into the rotor-swept zones of these turbines.</p> <p>Consideration should be given to the effect of the availability of sheep carcasses and as to whether the lough could be attracting eagles to the site. The existing adjacent windfarm could add to the cumulative risk of collision and narrow a potential corridor of flight activity (directional flight, social behaviour, and soaring). This factor should also be considered during the collision and mortality risk assessment for the project.</p> <p><u>Guidance on EIAR</u> You are advised to consult the European Commission’s (2017) ‘Environmental Impact Assessment: Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)’. Any surveys and assessments should be based on a full details of the overall project, noting all lands that will be required. For a detailed list of potential considerations, see the ‘Review checklist’, and specifically ‘Section 1 – Description of the project’, in this guidance. Note also that if compensatory afforestation is required on other lands, the likely significant effects of that integral element of the development should be assessed in the main project EIAR.</p> <p>In addition to guidance listed in Appendix 1, the following should be taken into account in planning and designing a windfarm and in completing the assessments. Please note the 2020 updates of the Guidance documents:</p> <ul style="list-style-type: none"><li>• Guidance document on wind energy developments and EU nature legislation (European Commission, 2020)</li></ul>		

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<ul style="list-style-type: none"><li><i>Draft Revised Wind Energy Development Guidelines (DoHLGH, 2020), particularly the requirements in relation to assessing ground conditions/geology (section 5.3 including hedges and trees, should not be removed during the nesting season (i.e. March 1<sup>st</sup> to August 31st).</i></li></ul> <p><i>In order to apply for any such licenses or derogations as mentioned above the results of a survey should be submitted to the National Parks and Wildlife Service of this Department. Such surveys are to be carried out by appropriately qualified person/s at an appropriate time of the year. Details of survey methodology should be provided. Should this survey work take place well before construction commences, it is recommended that an additional ecological survey of the development site should take place immediately prior to construction to ensure no significant change in the findings of the baseline ecological survey has occurred. As outlined already, if there has been any significant change mitigation, this may require amendment and where a licence has expired, there will be a need for new licence applications for the protected species.</i></p> <p><b>Appendix 1</b> <i>Notes on the preparation and content of an NIS</i> <i>The term 'NIS' is defined in legislation<sup>15</sup>. In general, an NIS, if required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge and objective information, as required in the case of screening for appropriate assessment, and by the precautionary principle.</i></p> <p><i>Based on the Department's experience of reviewing such reports, the following advice is offered in relation to the preparation and content of an NIS:</i></p> <p><i>1. An NIS is a scientific assessment that presents relevant evidence, data and analysis, and focuses on the implications of the plan or project, on its own and in combination with other plans and projects, for the conservation objectives of the relevant European site(s), taking the full scope of these objectives, whether generic or site specific, into account;</i> <i>2. Examination of the potential effects of the plan or project must be undertaken to identify what European sites, and which of their qualifying interests (SAC), special conservation interests (SPA) or conservation objectives, are potentially at risk. In combination effects must also be taken into account. This is required to determine a 'zone of influence' or 'zone of impact' for the project, if such a concept is used. The 15km distance in existing guidance is an indicative figure only and its application and validity should be examined and justified in each specific case on an ecological or other basis;</i> <i>3. The scientific basis on which sites and their conservation objectives are included or excluded from assessment and analysis should be presented and justified;</i> <i>4. The full area or extent of the likely effects of the plan or project should be determined and quantified. Where temporary damage and disturbance will occur, predicted timelines for recovery should be presented;</i> <i>5. The relevant environmental baseline and trends in European sites should be taken into account, bearing in mind changes and in combination effects which have occurred since site designation;</i> <i>6. An NIS should be informed by any necessary surveys of habitats and species at the appropriate time(s) of year to identify, describe, evaluate and map their presence within the receiving environment. In all relevant cases, the scientific basis and justifications for categorising or not categorising habitats as Annex I habitats, or priority types, should be presented;</i> <i>7. An NIS should be informed by any necessary hydrological, hydrogeological or geotechnical investigations to assess impacts on habitat structure and function;</i> <i>8. Where mitigation measures are required, full details should be included in the project description and drawings, with method statements provided, where necessary. It must be demonstrated that mitigation measures will be delivered in full, and at the appropriate time, at all post-consent stages, and that they will be effective in any specific location or set of conditions. The necessary analysis should be presented to demonstrate how the mitigation measures will avoid or remove the risks of adverse effects on the integrity of European sites that have been identified in an NIS so that the final analysis is undertaken in the context of the predicted residual effects;</i> <i>9. An NIS should contain, or clearly cross-reference, all the scientific data and analysis on which the assessment is based and should contain clear and precise findings and conclusions as to the implications of the project, on its own and in combination with other plans and projects, for the conservation objectives and integrity of the relevant European site(s).</i></p> <p><i>The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority/ies, in the role as statutory consultee under the Planning and Development Act, 2000, as amended.</i></p>		



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<i>You are requested to send further communications to the Development Applications Unit (DAU) at <a href="mailto:manager.dau@npws.gov.ie">manager.dau@npws.gov.ie</a>.</i>		
Department of the Environment, Climate and Communications	<p>The scoping document was forwarded internally to the Geological Survey Ireland which is a division of the Department of Environment, Climate and Communication.</p> <p><b>Response received 9<sup>th</sup> March 2022:</b>  <i>With reference to your email dated 17 February 2022, regarding the scoping letter for Gortloughra Wind Farm, Dunmanway, Co Cork, please note that Geological Survey Ireland has no specific comment or observations to make on this matter since our last response in January 2022 [21/481].</i></p> <p>The Geological Survey Ireland were included in this scoping exercise as a separate entity and their responses can be found below in this table.</p>	All items considered and assessed in full in this EIAR.	6, 8, 9
Fáilte Ireland	<p><b>Response received 25<sup>th</sup> February 2022:</b>  <i>Please see attached a copy of Fáilte Ireland's Guidelines for the Treatment of Tourism in an EIA, which you may find informative for the preparation of the Environmental Impact Assessment for the proposed project. The purpose of this report is to provide guidance for those conducting Environmental Impact Assessment and compiling an Environmental Impact Assessment Reports (EIAR), or those assessing EIARs, where the project involves tourism or may have an impact upon tourism. These guidelines are non-statutory and act as supplementary advice to the EPA EIAR Guidelines outlined in section 2.</i></p> <p><b>Response received 30<sup>th</sup> June 2023:</b>  <i>'...we have nothing further to add'</i></p> <p><b>Response 12/04/24:</b>  <i>Thank you for your email &amp; update. We have no further comments to make at this stage of the project but please refer to the attached Fáilte Ireland EIAR Guidelines 2023.</i></p>	All items considered and assessed in full in this EIAR.	5, 12
Department of Tourism	Please see response above from the Department of Housing, Local Government & Heritage/DAU (Development Applications Unit).	All items considered and assessed in this EIAR.	6, 7, 8, 9
OPW (Office for Public Works)	<p><b>Response received 21<sup>st</sup> July 2022:</b>  <i>If any new culverts or bridges (or modifications to any existing culverts or bridges) are required to cross watercourses as part of the development or on proposed or existing access roads to serve or access the development, you should be aware that these require consent from the Commissioners of Public Works. This is a requirement of Section 50 of the Arterial Drainage Act of 1945 as amended. It appears as if there are a number of watercourse crossings required on the wind farm site and on the access road...</i>  <i>...You should be aware that a grant of Planning Permission by a planning authority for a development which contains bridges or culverts does not confer section 50 consent on the applicant, nor does it absolve the applicant from the requirement to obtain such consent from the Commissioners...</i>  <i>...With regard to the proposed Grid Connection Route which is not indicated in your documentation, it is possible that this route may cross several watercourses. If the cable and ducting are to be buried in the road, as they cross bridges over the water courses, and there is no interference with the opening in the bridge spanning the watercourse, then there is no issue. On the other hand, if it is proposed to pass the cable in its ducting through the opening of any bridge or culvert, this would be considered to be a modification of a bridge and it would require the consent of the Commissioners under Section 50 as mentioned above. Similarly, if it is proposed to carry the cable in its ducting across watercourses on new support structures spanning the watercourses, these should be treated as if they are bridges, and the consent of the commissioners under Section 50 should be obtained. If the cable and ducting is to be buried under the natural bed of the watercourses being crossed, Section 50 would not apply, and we would recommend that the duct be buried a sufficient distance below the natural bed to allow for erosion and mobility of the stream bed.</i></p> <p><i>With regard to the proposed haul route, similarly, if there is any proposal to modify and existing bridges or culverts over watercourses or construct new ones, these will also need consent under Section 50, as referred to earlier.</i></p> <p><i>As a general comment we would advise at this stage that the existing horizontal and vertical alignment of watercourses, where crossings are proposed is not interfered with in so far as is practicable.</i></p> <p><i>We would recommend that a flood risk assessment be carried out with regard to the proposed development and its construction. This should consider all sources, pathways and receptors of flood risk. This should be carried out in accordance with the principles set out in the guideline document "The Planning System and Flood Risk Management" as published by the Minister for the Environment, Heritage and Local Government and the Office of Public Works. Please be aware that this is a separate issue from the requirement to obtain Section 50 consent as mentioned above.</i></p>	All items considered and assessed in this EIAR.	6, 7, 8, 9



Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter/Section where comments have been addressed
	<p><i>In terms of the preparation of an EIA, the matters referred to above principally relate to the Hydrology Section, and the Risk of Flooding on a development such as this can impact on Landscape (e.g. landslides that have been reported in recent years), Infrastructure (roads and bridges) and people and their homes, among other things. The aim of the Section 50 process, and the Flood Risk Assessment which is recommended would be to mitigate any increased risk of flooding and the consequences of same, as arising from the proposed development.</i></p> <p><i>The risk of landslides occurring as a result of activities associated with the development is a risk which should be assessed and mitigated by the developer separately from the Section 50 process.</i></p>		
The Heritage Council	No response received.	No impact on the design.	13
Tetra Ireland	Email response received on 01.10.2021 stating “we anticipate no impact from the development in the area proposed, can you ensure the proposal is also reviewed by eir”.	No impact on the design.	12
	Similar response received 20 <sup>th</sup> June 2023 and 17 <sup>th</sup> June 2024.		
Coillte	No response received.	No impact on the design.	N/A
Local Authority Waters Programme (LAWPRO) Arts Council	No response received.	No impact on the design.	N/A
Údarás na Gaeltachta	No response received.	No impact on the design.	N/A

### 1.11 DIFFICULTIES ENCOUNTERED

No specific difficulties, technical or otherwise, were encountered in the preparation of this chapter.

### 1.12 AVAILABILITY OF INFORMATION

A copy of the EIAR may be viewed online on the dedicated project website [www.gortaloughrawindfarm.ie](http://www.gortaloughrawindfarm.ie).

A copy of the EIAR can be viewed, during office opening hours at the following address:

1. The Offices of Cork County Council, Ground Floor, County Hall, Carrigrohane Road, Cork, T12 R2NC.
2. The Offices of Cork County Council, Norton House, Gortnacloghy, Skibbereen, Co. Cork, P81 AT28.

The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of the planning authority during its public opening hours.

Electronic copies are available via email ([info@jodireland.com](mailto:info@jodireland.com)).

### 1.13 GLOSSARY OF COMMON ACRONYMS

The common acronyms used throughout this EIAR are contained in Volume IV: **Appendix 1.4**.