# 1 Introduction

## 1.1 Introduction

This Chapter of the Environmental Impact Assessment Report (EIAR) introduces the Repowering of the Operational Barnesmore Windfarm (the Development) and provides details of the Environmental Impact Assessment (EIA) Project team and the structure of the report. It sets out the broad context and defines the key terms of reference used in the environmental assessment of the Development. The Development is subject to an EIA, under the EIA Directive 2011/92/EU (EIA Directive)¹ and the revised EIA Directive 2014/52/EU (Revised EIA Directive)².

This EIAR has been prepared by Jennings O'Donovan & Partners Limited (JOD) on behalf of ScottishPower Renewables (the Applicant) to accompany the application for permission for the Development. This EIAR takes into account the Development 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.

In addition to the identification, description and assessment of the Development, this EIAR identifies, describes and assesses the Project as a whole, the repowering permission, the battery storage permission and any other existing and permitted developments, including the proposed haul route. Together, each of these elements comprises the EIA Development which is the subject of this EIAR. This EIAR also 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 Revised EIA Directive.

This Chapter is supported by Figures in Volume III and the following Technical Appendices in Volume IV:

- Technical Appendix 1.1: Author Qualifications and Experience
- Technical Appendix 1.2: Cumulative Windfarm Sites
- Technical Appendix 1.3: Scoping Opinion
- Technical Appendix 1.4: Glossary of Common Acronyms

#### 1.2 Key Defined Terms

To ensure clarity in the EIAR the following defined terms are used throughout:

Table 1.1 Defined terms used throughout the EIAR

Term	Definition
An Bord Pleanála	The national planning appeals Board. An independent body that operates on an open and impartial planning appeal system.
Baseline Scenario	Refers to the current state of environmental characteristics, including any evident trends in its status
Baseline Survey	A survey to establish the current state of environmental characteristics
Decommissioning	Refers to the end of the operational life of the windfarm, where turbines are dismantled and taken off site. Turbine hardstands are reinstated, and Site Access Tracks are either reinstated or left in-situ.
EIA Regulations	Refers to Planning and Development Regulations 2001, as amended

<sup>&</sup>lt;sup>1</sup> The European Council Directive 2011/92/EU. Available online at https://eur-lex.europa.eu/eli/dir/2011/92/oj [Accessed 6 November 2019]

<sup>&</sup>lt;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 6 November 2019]

Term	Definition
Embedded Mitigation	Mitigation that is implemented within the Project design and includes best practice in implementing the design, as well as design features.
Energy Storage	The capture of energy produced at one time for use at a later time
Energy Storage Unit	The device that stores energy and includes the compound in which it is located
Existing Met Mast	Refers to the Meteorological Mast, which is currently located on Site, northeast of existing Turbine 11
Grid Connection	Refers to the connection from the on-site substation to the national grid
Initial Decommissioning	Refers to the decommissioning of the 25 turbine Operational Barnesmore Windfarm currently on Site
Met Mast	Refers to proposed 30 m Meteorological Mast to be located on Site
Operational Barnesmore Windfarm	Refers to the existing Barnesmore Windfarm at the Site, which has been operational since 1997
Operational Noise Study Area	Refers to the operational noise study area within 2.5 km of the Site
Repowering	This is the process of removal and replacement of older wind turbines with modern machines, which are generally quieter, and capable of producing more electricity, more efficiently.
Scoping	This is the process to identify key environmental issues, and to determine which elements of the Development are likely to cause significant environmental impacts and to identify elements that can be removed from the assessment.
Scoping Opinion	The response provided by third party consultee on key environmental issues
Site Access Tracks	Tracks/roads within the Development
SPR	ScottishPower Renewables
Study Areas	Refers to the spatial areas which are considered as part of the assessment process.  These are specific and are defined within each technical section.
Survey Areas	Refers to areas within which surveys are undertaken. These are specifically defined within each technical section.
Temporary Construction Compound	Refers to the temporary compound to be developed and used by the appointed contractor(s) for the purposes of constructing and commissioning the Development. Following completion of the initial decommissioning, construction and commissioning phase, this will become the location for the Energy Storage Unit.
The Applicant	Refers to ScottishPower Renewables
The Council	Refers to Donegal County Council
The Development	Refers to all elements of the application for the repowering of the Operational Barnesmore Windfarm, the details of which will be set out within <b>Chapter 2:</b> Development Description. These elements include the wind turbines, all site

Term **Definition** infrastructure, Site Access Tracks, energy storage facility etc. within the redline boundary. The EIA Directive Refers to the EIA Directive 2011/92/EU The Existing Permission Refers to the current permission for the operation of the existing 25 turbines on site and ancillary infrastructure. The permission runs in 'Perpetuity'. This means the existing turbines have permission to operate indefinitely. The Haul Route Refers to the proposed turbine delivery route on the public highway from Killybegs Port to the existing Development Site entrance The Substation Refers to the onsite substation and control building including the compound in which it is located The Project The preparation of an EIAR and planning application for the repowering of Barnesmore Windfarm Refers to revised EIA Directive 2014/52/EU The Revised EIA Directive The Site Refers to all land that falls within the Site Boundary The Site Boundary Refers to the red line boundary (as outlined in Figure 1.1)

## 1.3 The Applicant

Windfarm Internal Cabling

Transboundary Effects

Turbine Foundation

**Turbine Hardstand** 

ScottishPower Renewables (SPR) is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world's largest integrated utility companies and a world leader in wind energy. ScottishPower now only produces 100% green electricity – focusing on wind energy, smart grids and driving the change to a cleaner, electric future. The company is investing over £4m every working day in 2019 to make this happen and is committed to speeding up the transition to cleaner electric transport, improving air quality and over time, driving down bills to deliver a better future, quicker for everyone.

support the turbine hub

the on-site substation

turbine hubs, nacelles and rotor blades

Refers to effects which could be experienced in another jurisdiction, in this case, the Derry City and Strabane District Council administered area of Northern Ireland

Refers to the turbine's concrete base located under ground level which is used to

Refers to the hardstand next to the turbine location used by cranes for the erection of

Refers to the electrical cables connecting the turbines, either existing or proposed, to

SPR is at the forefront of the development of the renewables industry through pioneering ideas, forward thinking and outstanding innovation. Its ambitious growth plans include expansion of its existing onshore wind portfolio, investment in new large-scale solar deployment and innovative grid storage systems including batteries. The company is also delivering the Iberdrola Group's offshore windfarms in the Southern North Sea off East Anglia as part of an international pipeline of projects across Europe and the USA.

With over 40 operational windfarms, SPR manages all its sites through its world leading Control Centre at Whitelee Windfarm, near Glasgow and has been operational on the island of Ireland for over 20 years. SPR operates six onshore windfarms and has made major investments in key projects such as the bespoke turbine facility at Belfast Harbour in support of SPR's offshore developments that have led to significant job creation.

SPR's experience of developing, constructing and operating repowered onshore windfarm projects includes Carland Cross Windfarm in Cornwall, England, Coal Clough Windfarm near Burnley, England and Llandinam Windfarm in Wales.

#### 1.4 The Site

The existing turbines are sited on elevated moorland adjacent to Barnesmore Gap between the N15 and the Irish national border. The Site Boundary is wholly within the Republic of Ireland. A Site Location Map showing the site boundary outline is appended as **Figure 1.1** and a copy of the proposed 13 no. turbine Barnesmore Windfarm repowering layout is outlined as **Figure 1.2**. The existing site infrastructure is bounded by the Barnesmore Bog Natural Heritage Area (NHA); the existing windfarm infrastructure and an adjacent buffer zone are excluded from the designation.

The nearest inhabited residential dwelling is located 1.8 km from the nearest turbine to the north of the site. There are 19 houses within 2.5 km of the Development infrastructure (**Figure 1.3**).

Permission is being sought by the Applicant to repower the Operational Barnesmore Windfarm at Keadew Upper/Cullionbuoy, Co. Donegal. This will mean the complete removal of the existing 25, 600 kW turbines, replacing them with up to 13 turbines, each with a capacity of between four and six MWs. The benefit of this process is an increased overall generating capacity and output from 15 MW to over 50 MW, as well as a reduction to almost half the total number of turbines within the site. The principle of development has already been established on this site with the grant of planning permission for the Operational Barnesmore Windfarm. A key aim of the Project is to redevelop the site within the existing infrastructure footprint as far as possible.

The process of repowering will involve the following:

- Decommissioning and removal of 25 existing 600 kW turbines (which will take place in tandem with the construction of the Development)
- Erection of 13 new circa five MW turbines with a higher hub height and larger rotor diameter
- Construction of new or enlarging existing crane hardstand areas (using as much of existing hardstands as possible)
- Construction of new turbine foundations
- Upgrade of an existing 110 kV substation to connect to the national grid
- Upgrade of existing Site Access Tracks
- Erection of new Meteorological Mast (30 m) for monitoring wind speeds
- Reinstatement of areas of existing infrastructure which are not being used for the Development
- Cabling onsite between the turbines and the 110 kV substation
- Undergrounding of a section of the existing 110 kV overhead line to allow the construction of T10 and T12
- Construction of a new temporary site compound for use during the decommissioning and construction phase
- Construction of a new 15 MW Energy Storage Facility (Replacing Temporary Site Compound above)
- All ancillary works

A full description of the Development is provided in Chapter 2: Development Description. A site layout comparison is outlined in Figure 1.4 (a) and Figure 1.4 (b).

## 1.4.1 Planning history

Planning permission was granted by An Bord Pleanála on the 16 August 1996 under planning reference PL.05.098236 (Donegal County Council Planning Reference 95/914) for the erection of up to 26 no. 40 m hub height wind turbine masts, a transformer compound with an associated single storey switch room building and service roads at Keadew Upper, Barnesmore, Co. Donegal.

Planning permission was granted by Donegal County Council (DCC) for the construction of a six-megawatt (MW) Energy Storage Unit under planning reference 19/50357 on 12 June 2019, and a consent for the retention of a meteorological mast (Met Mast), installed under temporary planning exemption, on 12 June 2019.

Planning permission is now being sought by the Applicant to repower the Operational Barnesmore Windfarm at Keadew Upper, Cullionbuoy and Clogher, Co. Donegal. The Operational Barnesmore Windfarm is located approximately 10 km northwest of Donegal town and commenced operation in 1997. Currently, there are 25 x 600 kW wind turbines with a 61 m tip height on the Site.

## 1.5 Environmental Impact Assessment

## 1.5.1 Environmental Impact Assessment Requirement and National Legislation

The EIA Directive requires that, before consent is given for certain public and private projects, an assessment of the effects on the environment is undertaken by the relevant competent authority. The EIA Directive has been transposed into Irish legislation by the Planning and Development Act 2000, as amended (the Planning Acts) and the Planning and Development Regulations 2001, as amended (the Planning Regulations).

**Section 171A(1)** of the Planning and Development Act 2000 (as amended) defines an Environmental Impact Assessment (EIA) as an assessment, which includes an examination, analysis and evaluation carried out by a planning authority or An Bord Pleanála "that shall identify, describe and assess in an appropriate manner, in light of each individual case and in accordance with Articles 4 to 11 of the Environmental Impact Assessment Directive, the direct and indirect effects of a proposed development on the following:

- (a) human beings, flora and fauna
- (b) soil, water, air, climate and the landscape
- (c) material assets and the cultural heritage, and
- (d) the interaction between the factors mentioned in paragraphs (a), (b) and (c)".

**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 project:

**Class 3(i)** "Installations for the harnessing of wind power for energy production (windfarms) 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 Development involving the repowering of Barnesmore Windfarm comes within the scope of Class 3(i) and/or Class 15, and that it is appropriate to carry out an EIA of the Development.

In addition, the application meets the Strategic Infrastructure Development (SID) threshold for wind energy set out in the Seventh Schedule (Class 1) of the Planning and Development Act 2000, as amended, i.e. the Project will consist of a windfarm with a total output greater than 50 MW. Therefore, the Planning Application and this EIAR is being submitted directly to An Bord Pleanála as a SID project, in accordance with Section 37E of the Planning and Development Act 2000, as amended.

## 1.5.2 Directive 2014/52/EU

The EIA Directive has been amended on numerous occasions, most recently in 2014. The new approach to EIA seeks to address threats and challenges that have emerged since the original Directive came into force. The EIA Directive was amended by Directive 2014/52/EU and applicable from 16 May 2017.

On 1 September 2018, the Minister for Housing, Planning and Local Government published updated guidelines for planning authorities and An Bord Pleanála on carrying out Environmental Impact Assessments. The publication of the Guidelines coincides with the coming into operation on 1 September 2018 of the provisions of the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018), which were signed by the Minister on 26 July 2018. These Regulations transpose the requirements of Directive 2014/52/EU, amending previous Directive

2011/52/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 has been written to comply with the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018). To the extent relevant and necessary, 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 Directive 2014/52/EU provides where an EIA is required, the developer shall prepare and submit an Environmental Impact Assessment Report (EIAR) previously referred to as an Environmental Impact Statement (EIS). The information to be provided by the developer shall include at least:

- "(a) a description of the project comprising information on the site, design, size and other relevant features of the project
- (b) a description of the likely significant effects of the project on the environment
- (c) a description of the features of the project 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 project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project 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 project or type of project and to the environmental features likely to be affected"

The relevant classes/scales of development that normally require an EIA are set out in Schedule 5 (Part 2) of the Planning and Development Regulations 2001, as amended. The Development exceeds five turbines and five megawatts in scale, and therefore is subject to an EIA.

The EIAR provides information on the receiving environment and assesses the likely significant effects of the 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 examine the EIA of the Development and provide a reasoned conclusion on the significant effects of the Project. All elements of the Development (including the Grid Connection) have been assessed as part of this EIAR.

## 1.5.2.1 EIA Definition

The Revised EIA Directive (2014) defines the EIA as a process. Article 1(2)(g) states that the EIA means:

- "(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".

The definition in full, has been transposed into the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018), replacing Section 171A(1) of the Planning Acts.

#### 1.5.2.2 Factors of the Environment

The Revised EIA Directive 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 the Development on factors of the environment. These include the areas in **Table 1.2**, which also identifies the EIAR chapters where the environmental factors (a) to (e) have been addressed.

Table 1.2: Outline of respective chapters relating to the requirements of the revised EIA Directive

	ised EIA Directive Factor	Chapter	Title
(a)	population and human health	5	Population and Human Health
(b)	biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives	6	Biodiversity
	,	7	Ornithology
(c)	land, soil, water, air and climate	2	Project Description
		6	Biodiversity
		8	Soils and Geology
		9	Hydrology and Hydrogeology
		12	Material Assets & Other Issues
(d)	material assets, cultural heritage and the landscape	12	Material Assets & Other Issues
		13	Cultural Heritage
		11	Landscape and Visual Amenity
(e)	the interaction between the factors referred to in points (a) to (d)	15	Interactions of the Foregoing

## 1.5.2.3 Alternatives to the Development

Article 5(1) of the EIA Directive sets out the information to be contained in an EIS, and these provisions have been clarified by the Revised EIA Directive, in particular in relation to the requirement that the EIAR includes a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.

The obligation to address alternatives to the Development is enhanced under the 2014 Directive. The 2014 Directive provides that the information to be provided by the developer shall include at least, inter alia:

"(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment".

This is elaborated upon under Annex IV, paragraph 2 that states:

"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.".

The implications of the Revised EIA Directive in relation to alternatives are considered in **Chapter 3: Alternatives Considered**, of this EIAR.

This planning application is also accompanied by a Natura Impact Statement (NIS) as required under Article 6(3) of the EU Habitats Directive (92/43/EC). This is an assessment of the potential for significant or adverse effects resulting from the Development, both individually and in combination with other activities, plans and projects, on European Site(s) as designated under the EU Habitats Directive and the conservation objectives for their qualifying species and habitats.

#### 1.5.2.4 National Guidance

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

- Environmental Protection Agency (2002) Guidelines on the information to be contained in Environmental Impact Statements
- Environmental Protection Agency (2003) Advice notes on current Practice (in the preparation of Environmental Impact Statements)
- Environmental Protection Agency (2015) DRAFT Advice notes for preparing Environmental Impact Statements
- The Revised EIA Directive Circular PL 05/2018
- Environmental Protection Agency 'Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2017)
- Department of Housing, Planning and Local Government 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment' (August 2018)

#### 1.5.2.5 Competent Experts and Quality of the EIAR

Article 5(3) of the Revised 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 Development / EIA Development on the environment.

The Revised EIA Directive Consultation states that:

"It is not proposed to define the terms 'competent experts' or 'sufficient expertise' in legislation given the broad and diverse range of EIA topics and the different areas of specialist expertise.

It is proposed that the competency of experts preparing an EIAR should be a matter for each competent authority, having regard to the diverse range of EIA topics and areas of specialist expertise.

Guidance will address the issue of 'expertise' in both the preparation and assessment of EIARs.

It would be good practice for the EIAR to state who prepared each element of the EIAR and list the qualifications and experience of each such person to assist the competent authority satisfy itself as to the competency of the experts who prepared the EIAR. The level of expertise required for each element of the EIAR would depend on the nature and importance of that element vis-à-vis the size, nature and location of the project and the receiving environment and the likely significant impact on that environment".

The Applicant has considered 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 JOD, Consulting Engineers, Finisklin Business Park, Sligo, on behalf of the Applicant. 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 northwest of Ireland. JOD have been an established presence in the Renewable Energy Windfarm Sector since 1998. To date, the company has a portfolio of project involvement extending to over 2,000 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, in itself, 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). JOD are ISO 9001 accredited since 2001 and all projects undertaken follow the procedures as set out by these requirements. An area of strength noted in a recent independent audit of JOD's Q/EHS Management Systems in May 2018 was "Clear management focus on consultation and communication with clients".

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; and
- Sufficient experience and ability to carry out their duties in relation to the Project and to take appropriate actions required under the EIA Directive.

Specialist consultancies have been employed to complete seven of the EIAR chapters. Lead authors of each chapter and their relevant qualifications and experience can be found in **Technical Appendix 1.1**.

## 1.6 Need for the Development

Under the 2009 Renewable Energy Directive, Ireland is committed to produce at least 16% of all energy consumed by 2020 from renewable sources. This is to be met by 40% from renewable electricity, 12% from renewable heat and 10% from the renewable transport sector. The target to have 40% of electricity consumed from renewable sources by 2020 is one of the most demanding in the world. The Government has also pledged to generate 70% of the country's electricity supply from renewable sources by 2030.

The Renewable Energy Directive (recast) 2018/2001/EU entered into force in December 2018 and must be transposed by June 2021 (RED II). The ambition for increased electricity from renewable sources will be significantly ramped up under RED II. Repowering projects are subject to special provisions under RED II, reflective of the cost and environmental efficiencies achieved by these projects. Member states will be required to facilitate the repowering of existing projects by providing a simplified and swift permitting and grid connection process, subject to compliance with environmental and health and safety law<sup>3</sup>.

Ireland is therefore facing significant challenges in efforts to meet these targets, alongside its commitment to transition to a low carbon economy by 2050. Ireland is falling behind meeting its 2020 target for renewable energy, as well as the longer-term movement away from fossil fuels. There is a clear national effort to meet targets with 19 new onshore windfarms built in 2018.

Projects such as the Development will be critical to Ireland addressing these challenges, as well as combating the country's over-dependence on imported fossil fuels. This is due to the fact that this Project has the potential to result in an increase in the installed capacity of the site from the current 15 MW to over 60 MW, approximately four times the existing installed capacity. The proposed larger generator size, coupled with greater wind yields from the use of taller turbines with bigger rotors, and the improved efficiency of the latest turbine models, will result in a major increase to total power generated at the site. Repowering is a positive constructive step towards achieving our national targets and

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<sup>&</sup>lt;sup>3</sup> The European Council Directive 2018/2001/EU, Article 16. Available online at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001&from=EN [Accessed 29 November 2019]

avoids any potential "back sliding" from the targets should older sites be decommissioned, and this installed capacity be removed from the system.

The need for this Project is driven by the following factors:

- A requirement to diversify Ireland's energy sources, to achieve national renewable energy targets
- Reduce Ireland's dependency on fossil fuels resulting in lower carbon dioxide (CO<sub>2</sub>) emissions and output
- Avoid significant fines from the EU (the EU Renewables Directive) due to missed targets
- A legal commitment under the Kyoto protocol from Ireland to limit greenhouse gas emissions
- A requirement to increase Ireland's national energy security as set out in the Energy White Paper
- 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

Barnesmore Repowering will also offer opportunities such as:

- Utilising two decades of industrial knowledge to inform and improve the siting, design and construction techniques to create a more efficient Project
- Increasing site generation while reducing the number of turbines
- · Minimizing new environmental impacts by installing more efficient turbines on the existing site
- Operating for a longer period enables the Applicant to continue to drive down the overall cost of energy with benefits to the Irish consumer
- Providing opportunities to incorporate emerging technologies such as energy storage
- Developing a long-term Habitat Management Plan
- Establishing a local Community Benefit Fund

The Irish Wind Energy Association (IWEA), Ireland's largest renewable energy organization, in its second quarterly report in 2019<sup>4</sup> noted that 27% (40% target) share of electricity demand for Quarter 2 amounted to almost 1.9 million Megawatt hours (MWh) of electricity, compared to 1.6 million in the second quarter of 2018. The total installed capacity of the Republic of Ireland's windfarms has now risen to 3,748 MW (Quarter 1, 2019); this is approximately enough to power 2.2 million Irish homes annually.

Repowering will also present an opportunity to sustain and create additional jobs, and to encourage continued investment in the renewable industry in Ireland. The repowering of a windfarm differs from that of a developing a greenfield site, as the area has previously been developed, has demonstrated its suitability for use as a windfarm site and will continue to be used for the same activity.

Chapter four of this EIAR relates to the Planning Policy Context and presents a full description of the international and national renewable energy policy context for the Project. **Chapter 12: Material Assets and Other Issues**, **Section 12.1.61-69** addresses climate change, including Ireland's current status with regard to meeting greenhouse gas emission reduction targets.

# 1.6.1 Public Consultation

To consider the views and opinions of the local community on the Project, JOD organised four Public Information Days (PIDs) for the local community with the aim of informing the public about the Development, obtaining feedback on their views and taking any concerns on board in the design of the Development.

## 1.6.1.1 Public Information Days (PIDs)

The first round of PIDs was held as part of the Public Consultation process; the first day was on 1 May 2019 in Leghowney Community Hall, Leghowney (a venue close to the Site and easily accessible to local residents). The second date was on 2 May 2019 in the Mill Park Hotel, Donegal town. This venue was chosen to give access to the public in the wider area (Donegal town being the main urban centre). It was decided that the public consultation events should take place between the hours of 14:00 and 20:30, to give as many of the community members as possible the chance to attend, to view the proposals and ask questions of the Project team.

<sup>&</sup>lt;sup>4</sup> IWEA (2019) New quarterly report shows wind energy growing faster than ever. Available at: www.iwea.com/latest-news/2710-new-quarterly-report-shows-wind-energy-growing-faster-than-ever [Accessed 6 November 2019]

The second round of PIDs took place on 16 and 17 October 2019. The first day was held in Barnesmore Community Centre between the hours of 16:00 and 20:00. The second day was again held in Leghowney Community Hall between the hours of 11:00 and 17:00.

A Pre-Application Community Consultation (PACC) Report has been submitted to the Board as a standalone document as part of this planning application. The PACC Report summarises the consultation that has been undertaken with the local community, including reports of the PIDs, and details how comments received have been considered and addressed in the Project.

#### 1.6.1.2 Informing the Public and Local Residents

Local residents and the general public were informed of the PIDs through the following methods:

- Leaflet distribution in the local area
- Advertisements placed in a local newspaper over 2 consecutive weeks
- Posters placed in local supermarkets
- An advertisement released through the Leghowney Hall & Barnesmore Community Centre Facebook pages
- An advertisement in the Donegal town Parish newsletter at St. Agatha's church
- A press release on the SPR website

Letters were also sent in the post to stakeholders who may have an interest in the Project, namely, Lough Eske Castle, Harvey's Point, Lough Derg Sanctuary of Saint Patrick, Barnesmore Community Group and the local Councillors in the area.

A dedicated website has been set up for the Project and can be accessed at www.barnesmorewindfarm.com.

#### 1.6.2 Community Benefit and Community Involvement

A package of community benefits is voluntarily provided on all SPR onshore wind energy projects to enable the local communities hosting our windfarms to share in the benefits. SPR's operational windfarms have to date contributed more than €34 million of support towards community initiatives close to our windfarms. This has resulted in a fantastic diversity of initiatives being delivered, from improving local amenities including town halls, cinemas and local youth clubs, to supporting work experience placements, educational workshops and much more. If consented, it is proposed that Barnesmore Windfarm Repowering will offer an associated community benefit package.

Through the operation of the existing Barnesmore Windfarm, SPR has been present in the local community for over 20 years, and the repowering Project will give SPR the opportunity to integrate and contribute further to the local community. SPR is also committed to adhering to the recently published 'Code of Practice for Wind Energy Development in Ireland – Guidelines for Community Engagement' (the Code) and, as such, there will be continued engagement with the community throughout each phase of the Project from planning through to decommissioning/ construction, operation and decommissioning.

## 1.6.2.1 Information to be Included in a Decision to Grant

Article 8a (1) of the Revised EIA Directive states:

"The decision to grant development consent shall incorporate at least the following information:

- (a) the reasoned conclusion referred to in Article 1(2)(g)(iv);
- (b) any environmental conditions attached to the decision, a description of any features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment as well as, where appropriate, monitoring measures".

The Revised EIA Directive Consultation states that:

"This is a new provision indicating the information to be incorporated into a grant of development consent. The first part refers to the reasoned conclusion by the competent authority on the significant effects on the environment, having considered the EIAR and any supplementary information provided by the developer.

Other information which must be incorporated into a positive consent decision includes the following:

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

#### 1.7 EIAR Structure

This EIAR is presented in four volumes as follows:

Volume I: Non-Technical Summary (NTS)

The NTS is a non-technical overview of the EIAR and is intended for review by the general public. It includes a description of the Development and a summary of the predicted environmental effects.

#### Volume II: EIAR

The chapters in this EIAR are as follows:

- Chapter 1: Introduction
- Chapter 2: Development Description
- Chapter 3: Alternatives Considered
- Chapter 4: Planning Policy Content
- 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 Issues
- Chapter 13: Cultural Heritage
- Chapter 14: Traffic and Transport
- Chapter 15: 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: EIAR Technical Appendices

The Technical 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.

#### 1.8 EIA Project Team

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 1.5.2.5. **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 **Technical Appendix 1.1**.

Table 1.3: EIAR Project Team

EIAR Chapter	Contributor/Organisation
1-4: Introductory Chapters (incl. Planning)	Jennings O'Donovan & Partners Limited
5: Population and Human Health	Jennings O'Donovan & Partners Limited

**EIAR Chapter** Contributor/Organisation 6: Biodiversity Woodrow Sustainable Solutions Limited 7: Ornithology Bird Surveyors Limited 8: Soils and Geology Minerex Environmental Limited 9: Hydrology and Hydrogeology Minerex Environmental Limited 10: Noise Noise & Vibration Consultants Limited 11: Landscape and Visual Amenity Macro Works Limited Jennings O'Donovan & Partners Limited 12: Material Assets & Other Issues 13: Cultural Heritage John Cronin & Associates 14: Traffic and Transport Jennings O'Donovan & Partners Limited 15: Interactions of the Foregoing Jennings O'Donovan & Partners Limited

#### 1.8.1 Chapter Structure

In line with the revised EIA Directive and current (draft) EPA guidelines, each technical assessment included in the EIAR has followed the same general format:

- Introduction and assessment methodology
- Baseline description
- Assessment of potential effects
- Mitigation measures and residual effects
- Cumulative and transboundary effects
- Statement of significant effects

#### 1.8.1.1 Introduction, Assessment Methodology and Significance Criteria

Each technical assessment sets out the legislation, policy and guidance together with scope and methodology used to carry out the assessment of potential effects, including the criteria used to establish which effects are significant. Where a level of significance is attributed to an effect, this is based on technical guidance and professional judgement and generally informed by consideration of the sensitivity of the receptor, and the degree of the effect.

## 1.8.1.2 Baseline Description

The Operational Barnesmore Windfarm has been operating for over 22 years, and so the baseline scenario for the EIA is not that of an undisturbed greenfield site. The assessments therefore take account of the existing condition of the environment as the current baseline, incorporating all existing Site infrastructure, Site Access Tracks, hardstandings, cables, and the substation building as well as the wind turbines, foundations and the current land use management.

An understanding of the current baseline conditions provides a base reference against which the changes due to implementation of the Development are measured and allows an assessor to evaluate the sensitivity of any receptors within the defined study areas.

A list of the existing/operational and consented single turbines and windfarms included within 30 km of the Development is provided within **Technical Appendix 1.2**. Applications that have been submitted for single turbines and/or windfarms (but not yet processed) are also included and windfarms that are operational as of 16 December 2019; these developments are all treated as forming part of the existing baseline, except where specific guidance advises to the contrary. Technical assessments have been based on this compiled list with those relevant to each technical discipline selected. Each of the technical assessment chapters sets out baseline conditions as relevant to each technical area, the identification of any sensitive receptors, and a description of the respective study area.

#### 1.8.1.3 Assessment of Potential Environmental Effects

A description of how the baseline environment could potentially be affected by the Development, including prediction of potential significant effects comprising of both the initial decommissioning of the existing Barnesmore Windfarm and the construction and operation of the Development. Different environmental effects are likely to occur during the different phases of the Development. Effects taking place during the initial decommissioning and construction phases are generally considered to be short term and reversible, while effects arising as a result of the operational phase are generally considered to be permanent, but reversible upon future decommissioning of the Development.

The decommissioning of the repowered Barnesmore Windfarm is considered to pose no greater effects than those assessed as part of the combined initial decommissioning and construction phases of the Development. Each technical assessment considers the nature of the effects and includes any possible cumulative effects with other developments where appropriate.

The significance of effects resulting from the Development 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, visual etc. In general, this EIAR largely follows the principles and terminology of the 2017, Draft EPA 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' 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, 2017)

Impact Characteristic	Term	Description	
	Positive	A change which improves the quality of the environment	
Quality	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	
	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	
Significance	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities	
oignineance	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 population affected by an effect	
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions	
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	Momentary	Effects lasting from seconds to minutes	
Frequency	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	

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Impact Characteristic	Term	Description
	Frequency	Describe how often the effect will occur, (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Туре	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

## 1.8.1.4 Significance Criteria

The significance of the potential effects of the Development have been classified by taking into account the sensitivity of receptors and the magnitude of the potential effect 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, 2017)

Description of Impact Character/Magnitude/Duration/Probability/consequences						
Magnitude		Negligible	Low	Medium	High	
of Significance /Sensitivity	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	

## 1.8.1.5 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 to fully designed projects).

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. **Chapter 15: Interactions of the Foregoing** provides a summary of mitigation measures for all technical assessments.

#### 1.8.1.6 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 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.

#### 1.8.1.7 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 Development under the terms of the EIA Directive 2011/92/EU (EIA Directive) and the revised EIA Directive 2014/52/EU (Revised EIA Directive).

## 1.9 Scoping and Consultation

The scoping and consultation process has been carried out in accordance with the EIA Directive and in accordance with the Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, August 2017).

The Revised EIA Directive Circular 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 report was prepared in June 2019 and submitted to each of the consultees. 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 aims to inform the various organisations of the existence of the Project, thereby providing an opportunity to submit comments and to offer information relevant to the preparation of this EIAR. **Table 1.6** documents relevant responses from consultees, while a full list of all consultees and all responses can be found in **Technical Appendix 1.3: Scoping Opinion.** Where appropriate, comments are referred to and addressed in individual technical assessments.

# 1.10 Strategic Infrastructure Development (SID) Screening Process

Two pre-planning meetings were held with An Bord Pleanála as part of the SID screening process to determine if the Development was a SID.

On 12 September 2019, JOD was notified that this Development constitutes a SID in accordance with the 7<sup>th</sup> Schedule of the Planning and Development Act 2000 (as amended). The planning application for the Development will therefore be made to An Bord Pleanála under Section 37E of the Planning and Development Act 2000 (as amended).

Table 1.6: Consultation Undertaken for the EIA

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter / Section where Comments have been addressed
Donegal County Council Planning Department	Letter from Eunan Quinn, Senior Planner, dated 31.07.2019 and email dated 21/08/2019 provided comments relating to the transboundary context of the proposal, deletion of the wind energy strategy of the County Development Plan (CDP) 2018-2024, review of noise elements and vantage points identified,	No implications for the EIA/Design.	Transboundary: Chapter 4, Section 4.6 and CDP: Section 4.5.8. Viewpoints: Chapter 13, Section 13.4.3 Noise: Chapter 10, Section

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Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter / Section where Comments have been addressed
			10.2.7.1
Telecommunications			
Broadcasting Authority of Ireland	Email from Roger Woods, Senior Executive Engineer on 14.06.2019. The proposed windfarms are not located close to any existing or planned FM transmission sites.	No implications for the EIA/Design.	-
Three (Mosaic)	Email from Gerry Callan on 01.04.2019 and 11.04.2019. 100m buffer zone sought from links to ensure no impact on transmission network.	Consideration of location of the 'Three' telecommunications mast; original design location of Turbine 6 to be consequently moved.	Alternatives Considered: Chapter 3: Section 3.4.6.1
Ecology			
An Taisce	Email from Ian Lumley dated 14.06.2019 which states that Particular consideration is required on flight paths of migratory birds, foraging and breeding areas for raptors, peat displacement, and cumulative impact with other existing and proposed windfarms.	Embedded mitigation to alleviate concerns.	Ornithology: Chapter 7  Peat Displacement in Chapter 8, Section 8.4.2.3.3
Birdwatch Ireland	Email with attached letter received from Fintan Kelly, Policy Officer, dated 19.06.2019 with concerns regarding qualifying features of Barnesmore Bog NHA, Lough Eske and Ardnamona Wood SAC, Dunragh Loughs/Pettigo Plateau SAC; impact on all water bodies; an assessment on various breeding and overwintering species within the site.	Embedded mitigation to alleviate concerns.	Chapter 6, 7 and 9
Development Applications Unit (DAU), Department of Culture, Heritage and the Gaeltacht	Email from Alison Joyce, Higher Executive Officer dated 13.06.2019 (acknowledgement).  Letter from Sinéad O'Brien dated 25.07.19 on EIAR scope items relating to ecological surveys, hedgerows, watercourse and wetlands, bats, alien invasive species, bird surveys, impact assessment, Construction Management Plans, Cumulative and ex-situ impacts, Appropriate Assessment, post-construction monitoring, licences and baseline data.	Embedded mitigation. Develop a restoration programme.	Chapter 6, 7 and 9
Irish Peatland Conservation Council	Email with letter from Tristram Whyte, Conservation Policy & Fundraising Officer dated 30.08.2019. Concerns include loss and fragmentation of habitat. Possible reinstatement. Opportunities for monitoring.	Embedded Mitigation. Restoration approach to be outlined in a Habitat Management Plan. Conservation and mitigation measures will be outlined in an Outline Construction	Chapter 6

Consultee Organisation	Response Received	Implications for the EIA/Design	EIAR Chapter / Section where Comments have been addressed
		Environmental Management Plan (CEMP). Develop a Monitoring programme.	
The Royal Society for the Protection of Birds (RSPB) NI	Email with attachment from Roisin Kearney, Conservation Officer (Planning) received on 08.07.2019 noted that they do not manage site- specific data for the Site; recommendation to contact BirdWatch Ireland. Recommendations	Embedded mitigation. Consult Bird Watch Ireland.	Chapter 6, 7 and 9.
Soils and Water			
Geological Survey Ireland	Email with attachment from Siobhán Power on 08.07.2019 encouraging the use of their Map Viewer when undergoing the planning process.	No implications. Beneficial use of GSI mapping.	Chapter 9
Inland Fisheries Ireland (IFI)	Email from Brendan Maguire, Senior Fisheries Environmental Officer received on 08.07.2019. Letter attached outlining general guidance, mitigation measures and recommendations relating to potential impacts to watercourses from windfarm projects.	Embedded mitigation.	Chapter 6, 9
Loughs Agency	Letter from Declan Lawlor, Environmental Officer received 25.11.2019	Stormwater to be treated before discharge. Demonstrate best practice measures. Develop a Sustainable Urban Drainage System (SuDS)	Chapter 6 Chapter 8 Chapter 9
Other			
Health Service Executive	Letter received by post on the 24.06.2019 from Finan Gallagher, Principal Environmental Health Officer. Recommendations on the following matters be considered in the EIAR: Public Consultation; Opportunity for Health Gain; Noise & Vibration; Shadow Flicker; Air Quality; Water Quality; Geological Impacts and Ancillary facilities.	Recommendations considered. No implications.	Chapter 1, 5, 6, 8, 9, 10, 11 and 12
Transport Infrastructure Ireland	Letter received by post from Michael McCormack, Senior Land Use Planner on 20.06.2019. General guidance given for the preparation of the EIAR.	Recommendations and observations to be considered as part of the Project design.	Chapter 14
Fáilte Ireland	Email from Yvonne Jackson on 04.07.2019 with Fáilte Ireland's Guidelines for the treatment of tourism in an EIS.	Consider guidelines in outline of tourism.	Chapter 5
Donegal Airport	Email from Breandán Ó Baoill, Air Traffic Control dated 15.06.2019.	No implications for the EIA/Design. Inform the Irish Aviation Authority of	Chapter 12

Consultee Implications for the EIAR Chapter / **Response Received** Organisation EIA/Design Section where Comments have been addressed the increase to the turbine elevation. Irish Aviation Authority Email from Christophe.O'BRIEN@IAA.ie dated Incorporate three Chapter 12 (IAA) 22.10.2019 and letter from Deirdre Forrest conditions as outlined in 16.07.2019 scoping response letter

## 1.11 Availability of Information

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

- 1. The Offices of An Bord Pleanála, 64 Marlborough Street, Dublin 1.
- 2. The Offices of Donegal County Council, County House, The Diamond, Lifford, Co. Donegal.
- 3. Jennings O'Donovan & Partners Limited, Consulting Engineers, Finisklin Business Park, Co. Sligo, F91 RHH9.

Paper copies can be provided at the cost of printing, by writing to:

1. Jennings O'Donovan & Partners Limited, Consulting Engineers, Finisklin Business Park, Co. Sligo, F91 RHH9.

A dedicated website has been set up for the Project: www.barnesmorewindfarm.com.

## 1.12 Glossary of Common Acronyms

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