

Oweninny Wind Farm Phase 3

Environmental Impact Assessment Report

Appendix 1.2 Scoping Consultation

Ref.	Consultee	Issue date	Via	Response received date	Via
1	Airspeed	03-Feb-21	e-mail		
2	An Garda Síochána	03-Feb-21	e-mail		
3	An Taisce - The National Trust for Ireland	03-Feb-21	e-mail		
4	Bat Conservation Ireland	03-Feb-21	e-mail		
5	BirdWatch Ireland	03-Feb-21	e-mail		
6	Broadcasting Authority of Ireland	03-Feb-21	e-mail	04-Feb-21	e-mail
7	Commission for Regulation of Utilities	03-Feb-21	e-mail		
8	Community Radio Castlebar	03-Feb-21	e-mail		
9	ComReg	03-Feb-21	e-mail		
10	Coras Iompair Éireann (CIE)	03-Feb-21	e-mail		
11	Department of Agriculture, Food and Marine	03-Feb-21	e-mail	01-Mar-21	e-mail
12	Department of Communications, Climate Action and Environment	03-Feb-21	e-mail	25-Feb-21	e-mail
13	Department of Culture, Heritage and the Gaeltacht (Development Applications Unit)	03-Feb-21	e-mail	26-Feb-21	e-mail
14	Department of Defence	03-Feb-21	e-mail	08-Feb-21	e-mail
15	Department of Housing, Planning and Local Government	03-Feb-21	e-mail		
16	Department of Transport, Tourism & Sport	03-Feb-21	e-mail		
17	EIR	03-Feb-21	e-mail	04-Feb-21	e-mail
18	Eirgrid				
19	Enet Telecommunications	02-Mar-21	e-mail		
20	Environmental Protection Agency	03-Feb-21	e-mail	12-Mar-21	e-mail
21	ESB Telecom Services	03-Feb-21	e-mail		
22	Eurospat	03-Feb-21	e-mail		
23	Fálte Ireland	03-Feb-21	e-mail	24-Feb-21	e-mail
24	Fast.com	03-Feb-21	e-mail		
25	Geological Survey of Ireland	03-Feb-21	e-mail	10-Feb-21	e-mail
26	Health Service Executive	03-Feb-21	e-mail	04-Feb-21	
27	Host Ireland	03-Feb-21	e-mail		
28	Imagine Networks Services	02-Mar-21	e-mail	10-Feb-21	e-mail
29	Inland Fisheries Ireland	03-Feb-21	e-mail	25-Feb-21	e-mail
30	Irish Aviation Authority	03-Feb-21	e-mail	04-Feb-21	e-mail
31	Irish Parachute Club	02-Mar-21	e-mail		
32	Irish Peatland Conservation Council	03-Feb-21	e-mail		
33	Irish Raptor Study Group	03-Feb-21	e-mail		
34	Irish Red Grouse Association	03-Feb-21	e-mail		
35	Irish Water	03-Feb-21	e-mail	19-Feb-21	e-mail
36	Irish Wildlife Trust	03-Feb-21	e-mail		
37	Knock Airport	03-Feb-21	e-mail	03-Feb-21	e-mail
38	Magnet Networks	03-Feb-21	e-mail		
39	Mayo County Council Environmental Department	03-Feb-21	e-mail		
40	Mayo County Council Heritage Office	03-Feb-21	e-mail		
41	Mayo County Council Planning Department	03-Feb-21	e-mail		
42	Mayo Energy Agency	03-Feb-21	e-mail		
43	Mayo National Road Design Office	03-Feb-21	e-mail		
44	Midwest Radio	03-Feb-21	e-mail		
45	National Parks and Wildlife Service	03-Feb-21	e-mail		
46	Netshare Ireland / Vodafone	03-Feb-21	e-mail		
47	North Western Regional Assembly	03-Feb-21	e-mail		
48	Office of Public Works	03-Feb-21	e-mail	03-Feb-21	e-mail
49	OpenEir	02-Mar-21	e-mail		
50	Pure Telecom	03-Feb-21	e-mail		
51	RTE NL / 2RN	03-Feb-21	e-mail	04-Feb-21	e-mail
52	Sport Ireland	03-Feb-21	e-mail		
53	Sustainable Energy Authority of Ireland	03-Feb-21	e-mail		
54	TG4	03-Feb-21	e-mail		
55	The Arts Council				
56	The Heritage Council	03-Feb-21	e-mail		
57	Three Ireland (Hatchissse)				
58	Towercom Ltd.	03-Feb-21	e-mail	26-Feb-21	e-mail
59	Transport Infrastructure Ireland				
60	Vodafone	03-Feb-21	e-mail		
61	Virgin Media	03-Feb-21	e-mail	03-Feb-21	e-mail
62	Waterways Ireland				
63	Western River Basin District	03-Feb-21	e-mail		

6. Broadcasting Authority of Ireland

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.

Regards

Roger Woods
Senior Executive Engineer
Broadcasting Authority of Ireland
2-5 Warrington Place
Dublin D02 XP29

11. Department of Agriculture, Food and Marine

1st February 2021

Brian Gallagher

TOBIN Consulting Engineers,

Castlebar,

Co.Mayo

Re: E.I.A.R. Scoping Request for the proposed for development Oweninny Wind Farm Phase 3 at Bellacorick, Co. Mayo

Dear Sir/Madam,

The following are the comments from this Division in relation to the proposed development:

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**. Tel: 076-1064459, Web <https://www.agriculture.gov.ie/forests-service/tree-felling/tree-felling/>

A Felling Licence granted by the Minister for Agriculture, Food and the Marine provides authority under the Forestry Act 2014 to fell or otherwise remove a tree or trees and/or to thin a forest for silvicultural reasons. The Act prescribes the functions of the Minister and details the requirements, rights and obligations in relation to felling licences. The principal set of regulations giving further effect to the Forestry Act 2014 are the Forestry Regulations 2017 (S.I. No. 191 of 2017).

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; <https://www.agriculture.gov.ie/media/migration/forestry/tree-felling/FellingReforestationPolicy240517.pdf>. As this development is within forest lands, particular attention should be paid to deforestation, turbulence felling and the requirement to afforest alternative lands.

In order to ensure regulated forestry operations in Ireland accord with the principles of sustainable forest management (SFM), as well fulfilling the requirements of other relevant environmental protection laws, the Department (acting through its Forest Service division) must undertake particular consultations, and give certain matters full consideration during the assessment of individual Felling Licence applications. This includes consultation with

relevant bodies, the application of various protocols and procedures (e.g. Forest Service Appropriate Assessment Procedure), and the requirement for applicants on occasion to provide further information (e.g. a Natura Impact Statement).

Consequently, when the Forest Service is considering an application to fell trees, the following applies:

1. The interaction of these proposed works with the environment locally and more widely, in addition to potential direct and indirect impacts on designated sites and water, is assessed. Consultation with relevant environmental and planning authorities may be required where specific sensitivities arise (e.g. local authorities, National Parks & Wildlife Service, Inland Fisheries Ireland, and the National Monuments Service);
2. Where a tree Felling Licence application is received, the Department will publish a notice of the application before making a decision on the matter. The notice shall state that any person may make a submission to the Department within 30 days from the date of the notice. The notices for 2020 are published online at:
<https://www.agriculture.gov.ie/forests-service/publicconsultation/environmentalimpactassessment-eia-publicconsultation-for-afforestation-forest-road-construction-and-felling-licences-2020/>
3. Third parties that make a submission or observation will be informed of the decision to grant or refuse the licence, and on request, details of the conditions attached to the licence, the main reasons and considerations on which the decision to grant or refuse the licence was based, and where conditions are attached to any licence, the reasons for the conditions. Both third parties and applicants will be also informed of their right to appeal any decision within 28 days to the Forestry Appeals Committee. Felling Licence decisions for 2020 are published online at:
<https://www.agriculture.gov.ie/forests-service/publicconsultation/environmentalimpactassessment-2020-register-of-decisions/>

It is important to note that when applying to a **Local Authority**, or **An Bord Pleanála**, for planning permission where developments are:

- 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
- b) subject to an Appropriate Assessment procedure (including screening) and any resulting requirement to a Natura Impact Statement (NIS); and

- 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,
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
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 Pleanàla, 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.

Yours sincerely,

Tara Hendley

Tara Hendley

Felling Section

Department of Agriculture, Food and the Marine

Johnstown Castle

Co Wexford

13. Department of Culture, Heritage and the Gaeltacht (Development Applications Unit)



**An Roinn Turasóireachta, Cultúir,
Ealaíon, Gaeltachta, Spóirt agus Meán**
Department of Tourism, Culture,
Arts, Gaeltacht, Sport and Media

Your Ref: Oweninny Wind Farm Phase 3

Our Ref: G Pre00058/2021 (Please quote in all related correspondence)

Environmental Licensing Programme
Office of Environmental Sustainability
EPA
Johnstown Castle Estate
Wexford

Via email: eiaplanning@epa.ie

Re: Re: Notification to the Minister for Culture, Heritage and the Gaeltacht under the Planning and Development Act, 2000, as amended.

Re: EIA SCOPING for proposal to develop the Oweninny Wind Farm Phase 3 at Bellacorick, Co. Mayo

A chara

I refer to your pre-planning correspondence received on 17th February in connection with the above proposed development.

Outlined below are heritage-related observations/recommendations co-ordinated by the Development Applications Unit under the stated headings.

Nature Conservation

The Department refers to your correspondence and your request for observations on the preparation of the EIAR. The Department notes the detailed scoping document provided which sets out the key issues to be considered in the EIAR. Based on the information currently available about the location of the proposed development, a Natura Impact Statement (NIS) may also be required.

As an initial response to your consultation, you are advised to consult the 'Planning' section of the NPWS website - <https://www.npws.ie/development%20consultations> as this contains text/advice on consulting NPWS in relation to 'development applications', data and information sources, and the basic elements of environmental assessments that may be required.

The following scoping comments are made in the context of this Department's role in relation to nature conservation. The observations are intended to assist you in relation to identifying potential impacts on European sites, other nature conservation sites, and biodiversity and

Aonad na nIarratas ar Fhorbairt

Development Applications Unit

Oifigí an Rialtais

Government Offices

Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90

Newtown Road, Wexford, County Wexford, Y35 AP90



environmental protection in general, in the context of the current proposal. Data collected and surveys carried out in connection with this proposed development may raise other issues that have not been considered here. The observations are not exhaustive and are made without prejudice to any recommendation that may be made by this Department in the future

1. Guidance on EIAR

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.

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:

- Guidance document on wind energy developments and EU nature legislation (European Commission, 2020)
- Draft Revised Wind Energy Development Guidelines (DoH/LGH, 2020), particularly the requirements in relation to assessing ground conditions/geology (section 5.3)
- Landslides in Ireland (GSI, 2006)¹.

In considering a windfarm in this area, the Mayo Wind Energy Strategy and its associated appropriate assessment and SEA Environmental Report should be checked for any mitigation that applies in this type of situation, given the proximity and potential for negative effects of this proposal on protected sites of national and international importance for nature conservation.

1.1. Project planning and design

It should be remembered that a key element of EIA is the avoidance or reduction of negative effects on the environment. EIA is an iterative process and the information gathered through assessments or surveys should be used to guide the planning and design of the windfarm so that sensitive ecological or hydrological areas are avoided, and negative impacts are minimised insofar as is possible. The size, layout and design of the proposed development should be informed by a constraints-type study and the compilation of an environmental constraints map that identifies and avoids, insofar as is possible and using appropriate separation distances, all nature conservation sites, other sensitive ecological and

¹ Creighton, R. (ed.). 2006. *Landslides in Ireland: A Report of the Irish Landslide Working Group*. Geological Survey of Ireland, Dublin.



hydrological features, deep or intact peat deposits, and areas of wet and/or active bog, pool systems and flushes.

The National Biodiversity Action Plan 2017- 2021 aims to conserve and restore Ireland's biodiversity. A key objectives of the plan is to achieve; no net contribution to biodiversity loss arising from development projects occurring within the lifetime of the plan. Accordingly, the EIAR should outline how this project will avoid a net loss of biodiversity and include relevant mitigation and or compensatory measures where necessary.

1.2. Project components

In general, the EIAR should include sufficient project details so that the full nature and extent of the likely significant effects are clear and assessed fully in relation to, among other things, road design and construction methodology; site drainage details, including settlement ponds; temporary and permanent storage or disposal areas for peat and other materials or wastes arising; extraction sites/borrow pits; and any modifications to roads, bridges or culverts along the entire length of haul routes. Volumes of surplus material arising and of fill required should be calculated. Due consideration should also be given to the grid connection.

The Department notes that the location map provided is within a peatland site. The EIAR should give specific consideration to the mobilisation of silt and changes to the stability of peat. The proposed windfarm has the potential for significant changes in patterns of surface water flow and may desiccate the peat allowing pathways to open up resulting in subsurface water losses. It should be noted that in 2020 a number of major upland peatland (blanket bog) landslides occurred across Ireland, most notably on Shass Mountain near Drumkeeran in County Leitrim² and Meenbog, near Ballybofey in County Donegal. The Peat Stability Risk Assessment must be considered in light of these occurrences with consideration of climate change predictions (e.g. rainfall level) in the hazard rating and should thoroughly assess risk with regard to change in weather patterns due to climate change such as more frequent and intense storms and rainfall events, increased likelihood and magnitude of river flooding, prolonged periods of dry conditions which may increase the likelihood of unstable peat.

Detailed consideration should be given to the amount of peat to be excavated, stored, and disposed/recovered. A detailed plan for the safe storage, disposal and rehabilitation of excavated or disturbed peat should form part of the EIAR. The spreading or recovery of excavated peat on areas of intact bog, wet and revegetated areas of cutover bog or other habitats or vegetation of ecological value is unlikely to be acceptable. Excavated or exposed peat should not pose any threat to surface waters and water quality. Any proposals to combine peat disposal with habitat restoration or rehabilitation measures will require a detailed plan to show the location, nature and area of lands in question, and provide details of how such areas will be reinstated, managed and improved for habitats and/or species, together with proposals for monitoring and reporting. This plan should be prepared by a suitably qualified ecologist in consultation with hydrologists and other experts as appropriate.

² <https://www.npws.ie/news/shass-mountain-peat-landslide-report-published>



A detailed site drainage map will be required and should show all existing watercourses, drainage ditches, flushes, lakes or ponds; new drainage ditches; all outfall points to watercourses or lakes; and all settlement ponds. The EIAR must demonstrate that the proposed development will not pose any threat to surface waters and associated species. Any impact on water table levels or groundwater flows may impact on wetland sites some distance away. The EIAR should assess cumulative impacts with other plans or projects, if applicable. Where negative impacts are identified suitable mitigation measures should be detailed as appropriate.

The associated impacts of quarrying or extraction should be included among the considerations at the earliest stages of project planning and design, and should be assessed fully in the EIAR. Reinstatement or restoration plans will be required for any quarries or borrow pits on-site and should be included in the EIAR. As with any other part of the development, all borrow pits (existing or proposed) to be used in construction should be included within the application area for the proposed development.

Any tree felling of forested sites should be included as an intrinsic element of the overall development, the impacts and implications of which should be assessed fully in the EIAR. The extent of tree felling should be mapped, and the future use and management of all cleared areas should be specified. The impacts of tree felling on wildlife, habitats and surface waters (e.g. water quality) should be assessed fully, including the risk of Phosphate mobilisation from peat soils as a result of tree clearance and ground disturbance.

Tree felling is licensed and regulated by the Forest Service; any additional requirements in respect of this element of the proposed development, including any obligations to replant on other lands, should be made known at the planning application stage, and assessed as part of the EIAR as appropriate. If restoration of planted areas is proposed as mitigation or compensation for negative ecological effects, the EIAR should include a detailed plan to show the location, nature and area of habitat to be reinstated, and provide details of how such areas will be reinstated, managed and improved for habitats and/or species, together with proposals for monitoring and reporting. This plan should be prepared by a suitably qualified ecologist in consultation with other experts as appropriate.

The likely impacts of grid connection, particularly for birds, sensitive habitats and surface waters, should be given due consideration at the EIA stage.

Any improvement or reinforcement works required for access and transport anywhere along the proposed haul route(s) should be included in the EIAR and subjected to ecological impact assessment with the inclusion of mitigation measures, as appropriate.

Any losses of biodiversity habitat associated with this proposed development (including access roads and cabling etc.) such as woodland, scrub, hedgerows and other habitats should be mitigated for. In addition, Annex 1 habitats which occur outside the Natura 2000 network are important in terms of biodiversity conservation. The presence of any Annex I habitats outside the network should be given due consideration as part of the consideration of biodiversity matters generally for the proposed development. The loss of Annex 1 habitats outside SACs should be avoided wherever possible.



You are advised that no disturbing or damaging site or ground investigations, or testing, should take place in an ecological site, including national (NHA) and European sites (SAC and SPA), in advance of the main project consent without due consideration of the need for planning permission (for exempted development where there are restrictions on exemptions), or another consent.

1.3. Ecological Data and Surveys

Along with the standard NPWS data requests which is recommended, other sources of habitat and species information beyond those already identified include (but are not be limited to): the National Biodiversity Data Centre (www.biodiversityireland.ie), Inland Fisheries Ireland (www.fisheriesireland.ie), BirdWatch Ireland (www.birdwatchireland.ie), Irish Raptor Study Group, Golden Eagle Trust and Bat Conservation Ireland (www.batconservationireland.org). Some guidance and reference documents are provided in the Appendix to this letter.

It is expected by this Department that best practice will be adhered to with regard to survey methodology and if necessary non Irish methodology adapted for the Irish situation, noting specific gaps in relation to species and age of the data outlined in some guidance documents. The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases. Alternatives examined should also be included in the EIAR. Inland Fisheries Ireland should be consulted with regard to fish species, if applicable. For information on Geological and Geomorphological sites, the Geological Survey of Ireland, should be consulted.

Where ex-situ impacts are possible, survey work may be required, outside of the development sites. Such surveys should be carried out by suitably qualified persons at an appropriate time of the year, depending on the species being surveyed for. The EIAR should include the results of the surveys and detail the survey methodology and timing of such surveys including consistency in terms of timed vantage point surveys.

1.3.1. Ornithology

Surveys for all species should cover bird usage and facilitate assessment of potential collision risk, habitat loss, barrier effect and displacement for these species and should be based around the daily and seasonal activity patterns of the species being surveyed. Survey work should cover year-round site use and should cover a minimum of two years to allow for an accurate determination of site usage. Target species for this site include Annex I (Birds Directive) species and Birds of Conservation Concern (BoCCI) such as Hen Harrier, Merlin, Red Grouse, Woodcock and breeding Waders. Hinterland surveys therefore should include breeding raptor surveys, including roost watches. Hen Harrier winter roosts have been recorded from the area from two known sites. Hen Harrier is regarded as a sensitive species in terms of NPWS Data Requests. Information may be requested specifically via the NPWS.ie website at <https://www.npws.ie/maps-and-data/open-data-policy>. NPWS will have specific data with regard to these two roost sites. It should be noted that one site has only recently



been recorded by NPWS. Surveys for nocturnal species and other species-specific surveys should also be carried out as appropriate.

Vantage point surveys should be done in a manner that ensures sufficient data is collected to allow an assessment of the importance of all the flight paths into, out of and between sites and assess migratory movements. Consequently, the Department recommends that a visibility analysis of topography and vegetation is used in the selection of vantage points for ornithological surveys. Technological solutions should also be considered in conjunction with VPs surveys to ensure sufficient data is compiled for assessment.

Results for species need to be referenced back to the overall populations and their dynamics as, in some cases even a small risk to a population of a species could be considered significant.

When completing impact assessment for birds, assessment and monitoring results from nearby windfarms must be considered. Cumulative impact on birds from all windfarms in the area needs to be assessed and the data from surrounding sites needs to be considered in the assessment.

1.3.2. Bats

Bat roosts may be present in trees, buildings and bridges. Bat species are protected under the Wildlife Act, 1976 to 2018, and are subject to a regime of strict protection pursuant to the requirements of the Habitats Directive (92/43/EEC) as transposed in Irish law in Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended). Therefore, damage/disturbance to any such roosts must be avoided in the first instance. While the Minister may grant a derogation licence under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2015, a licence can only be granted once a number of strict criteria have been met (see Regulation 54). An assessment of the impact of the proposed wind farm on bat species should be carried out noting recent guidance available, “Bat and Onshore Wind Turbines: Survey, Assessment and Mitigation, 2019” published jointly by Scottish Natural Heritage and Bat Conservation Trust and other stakeholders.

The Department would like to highlight new research on patterns of bat activity in upland wind farms³ which indicates it is more appropriate to use 30 day survey periods with static automated detectors, in each season, and in different weather conditions to reduce sampling bias and to accurately determine when the curtailment mitigation is required during the operational phase. This survey should include use of detectors at different heights. Any proposed bat friendly lighting should be proven to be effective and follow up to date guidance.

³ <https://cieem.net/resource/cieem-webinar-patterns-of-bat-activity-at-upland-windfarms-implications-for-sampling-and-mitigation/>



1.3.3. Bryophytes - Flora Protection Order Species

The protected bryophytes *Paludella squarrosa* and *Leiocolea rutheana* have been recorded at Formoyle in transitional fen / wet flushes in close proximity to the application site. These species are protected under Section 21 of the Wildlife Act, 1976 to 2018, and listed in the Flora (Protection) Order, 2015 (S.I. No. 356 of 2015). This is the only site in Ireland and Britain for *Paludella squarrosa* and is 'critically endangered'. *Leiocolea rutheana* is only recorded at two other sites in Ireland, which are both in the same area in Mayo (Doobehy and Brackloon Lough). This liverwort is listed as 'endangered'. Information is available on the NPWS Bryophytes Map Viewer⁴. Due to their conservation status, high ecological importance, sensitivity and close proximity to the application site, it is important that a specialist bryophyte survey is conducted. Surveys must be carried out within the developable area and areas of suitable habitat within the application site.

1.3.4. Watercourses and wetlands

The Oweninny site has a number flushes and fens that are influenced from calcareous upwelling due to the limestone belt at this location. Assessment of hydrological influences on the wetland habitats from the proposed development must be considered in detail.

Wetlands are important areas for biodiversity and ground and surface water quality should be protected during construction and operation of the proposed development. Any watercourse or wetland which may be impacted on should be surveyed for the presence of protected species and species listed on Annexes II and IV of the Habitats Directive. For example, these species could include Otter (*Lutra lutra*) which are protected under the Wildlife Acts and listed on Annex II and IV of the Habitats Directive, Salmon (*Salmo salar*), Lamprey (three species in Ireland) listed on Annex II of the Habitats Directive, Freshwater Pearl Mussel (*Margaritifera* species) and White-clawed Crayfish (*Austropotamobius pallipes*) which are both protected under the Wildlife Act and listed on Annex II of the Habitats Directive, Frogs (*Rana temporaria*) and Newts (*Triturus vulgaris*) protected under the Wildlife Acts and Kingfishers (*Alcedo atthis*) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC).

The site drains into three separate Water Framework Directive Sub-Catchments, principally into the Owenmore (Mayo) to the west, and then also to the Deel (Crossmolina) in the east and the Cloonaghmore to the north east. The Deel is listed as a prioritised area for action (AFA) in the Draft Western Region River Basin Management Plan (3rd cycle) and is part of the Moy-Deel *Margaritifera* Sensitive Area.

⁴ <https://dahg.maps.arcgis.com/apps/webappviewer>



Further to potential impacts on the species listed above, for example, one of the main threats identified in the threat response plan for otter is habitat destruction (see https://www.npws.ie/sites/default/files/publications/pdf/2009_Otter_TRP.pdf).

A 10m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. Therefore any proposed development should be located at least 10m away from a waterway and should consider movements between waterways and waterbodies by otters.

1.3.5. Freshwater Pearl Mussel

The proposed development site is partially within the Moy-Deel Margaritifera Sensitive Area. The species is an Annex II species of the EU Habitats Directive and is critically endangered in Ireland. Alteration of the hydrological regime / watercourses within the catchment can have significant effects on this species through eutrophication and siltation pressures on the water courses. Detailed Freshwater Pearl Mussel surveys will be required. Detailed information on the species and assessment requirements are available at <https://www.npws.ie/research-projects/animal-species/invertebrates/freshwater-pearl-mussel>.

1.3.6. Flood plains

Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable habitats and provide areas for flood water retention (green infrastructure). If applicable, the EIAR should take account of the guidelines for Planning Authorities entitled "The Planning System and Flood Risk Management" published by the Department of the Environment, Heritage and Local Government In November 2009.

1.3.7. Hedgerows, Scrub and related habitats

Hedgerows and scrub should be maintained where possible, as they form wildlife corridors and provide areas for birds to nest in; hedgerows provide a habitat for woodland flora, roosting places for bats and Badger setts may also be present. The EIAR should provide an estimate of the length/area of any hedgerow/scrub that will be removed. Where it is proposed that trees or hedgerows will be removed there should be suitable planting of native species in mitigation incorporated into the EIAR. Hedgerows, trees, scrub and vegetation on lands not then cultivated (including peatland habitats) should not be removed during the growing season (i.e. March 1st to August 31st), noting the protection afforded under the Wildlife Act 1976-2018.

1.3.8 Marsh Fritillary

Marsh fritillary surveys should be carried out as per standard Marsh Fritillary Larval Web Survey methodology.



1.3.9 Alien invasive species

The EIAR should also address the issue of invasive alien plant and animal species such as *Rhododendron ponticum* and Japanese Knotweed, and detail the methods required to ensure they are not accidentally introduced or spread during survey and or construction. Information on alien Invasive species In Ireland can be found at <http://invasives.biodiversityireland.ie/> and at <http://invasivespeciesireland.com/>.

1.4. Impact assessment

The impact of the proposed development on the flora/ fauna and habitats present should be assessed with particular regard to:

Natura 2000 sites, i.e.:

- Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC)
- and Special Protection Areas (SPA) designated under the EC Birds Directive (Council Directive 2009/147 EC),
- other designated sites, or sites proposed for designation such as,
- Natural Heritage Areas;
- proposed Natural Heritage Areas;
- Nature Reserves (specifically Knockmoyle / Sheskin National Nature Reserve);
- Refuges for Fauna or Flora designated under the Wildlife Acts 1976 to 2018;
- species protected under the Wildlife Acts including protected flora;

'Protected species and natural habitats', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008 including

- Birds Directive - Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
- Habitats Directive - Annex I habitats, Annex II species and their habitats;
- Annex IV species and their breeding sites and resting places (wherever they occur);
- important bird areas such as those identified by Birdlife International, features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive;



- other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans);
- Red data book species;
- and biodiversity in general.

1.5. Construction Management Plans and Mitigation

Complete project details including Construction Management Plans (CMPs) need to be provided in order to allow an adequate EIAR and appropriate assessment to be undertaken. CMPs should contain sufficient detail to avoid any post construction doubt with regard to the implementation of mitigation measures, timings and roles and responsibilities for same. Any mitigation needs to be included in detail and if being relied upon to reach conclusions must be proved to be achievable and likely to be effective in any given scenario it is needed. Proof of effectiveness will be required with examples of where similar techniques have been employed previously.

Applicants need to be able to demonstrate that CMPs and other such plans are adequate, all mitigation is included and effective and supported by scientific information and analysis and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation such as settlement ponds, disposal sites and construction compounds may significantly affect European and other designated sites, habitats and species in their own right and could have an effect for example on, drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment all potential effects of the development on the site are not being considered.

Construction work should not be allowed to impact on water quality and measures should be detailed in the EIAR to prevent sediment and/or fuel runoff from getting into watercourses which could adversely impact on aquatic species.

Inland Fisheries Ireland (IFI) should be consulted with regard to impacts on fish species and the applicant may find it useful to consult their publication entitled "Planning for watercourses in the urban environment" (2020) which can be downloaded from their web site.

If applicants are not in a position to state the exact location and details of cable routes at the time of application, then they need to consider the range of options (overhead and underground) that may be used within their assessment. Should the exact height and rotor diameter of the turbines not be known at EIAR stage then the assessment of impacts must be applicable to a variety of turbine heights and rotor diameters which could be used. This should be made clear in the EIAR.

2. Guidance on the Appropriate Assessment (AA):

The Oweninny site is surrounded by a number of European designated sites which include Bellacorick Iron Flush SAC (000466), Bellacorick Bog Complex SAC (001922),



Owenduff/Nephin Complex SPA (004098) and SAC (000534) and Carrowmore Complex SAC (000476) and SPA (004052).

In order to carry out the Appropriate Assessment screening, and/or prepare a Natura Impact Statement (NIS), information about the relevant European sites including their conservation objectives will need to be collected.

Screening for appropriate assessment should focus on the likely significant effects of the proposed development and related activities on European sites noting that impacts to sites via air and water may occur over large distances using the source-pathway-receptor model. Details of designated sites and species and conservation objectives can be found on <http://www.npws.ie/> .

Site-specific, as opposed to generic, conservation objectives are now available for many sites. Each conservation objective for a qualifying interest (QI) habitat or species is defined by a list of attributes and targets and is often supported by further documentation. Where these are not available for a site, an examination of the attributes that are used to define site-specific conservation objectives for the same QIs in other sites can be usefully used to ensure the full ecological implications of a proposal for a site's conservation objective and its integrity are assessed. It is advised, as per the notes and guidelines in the site-specific conservation objectives that any reports quoting conservation objectives should give the version number and date, so that it can be ensured and established that the most up-to-date versions including map boundaries⁵ are used in the preparation of Natura Impact Statements and in undertaking appropriate assessments.

In addition, the Article 12 and 17 reports under the Birds and Habitats Directives should be referenced <https://www.npws.ie/publications>. The Departmental guidance document on Appropriate Assessment is available on the NPWS website at <https://www.npws.ie/development-consultations> and in EU Commission guidance entitled:

- “Wind energy developments and Natura 2000⁶”
- "Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC"⁷ ;
- 2018 Commission notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC"⁸ (updated June 2020)

More recent CJEU and Irish case law has clarified some issues and should also be consulted.

⁵ <https://www.npws.ie/maps-and-data/designated-site-data>

⁶ https://ec.europa.eu/environment/nature/natura2000/management/docs/Wind_farms.pdf

⁷ http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

⁸

https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN_art_6_guide_jun_2019.pdf



The NIS should present a robust and reasoned scientific assessment and analysis of the implications of the proposals for the relevant conservation objectives of relevant European sites. Best scientific knowledge in the field should be applied to the understanding of the likely effects, and to the assessment and analysis of the implications of the proposals for the conservation objectives and integrity of the sites. When carried out by the competent authority, the appropriate assessment cannot have lacunae and must 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. General advice on the preparation, content and scope of an NIS is included in Appendix 2.

3. Cumulative and ex situ impacts

A rule of thumb often used is to include all European sites within a distance of 15km. It should be noted however that this will not always be appropriate. In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 kilometres away.

Other relevant Local Authorities should be consulted to determine if there are any projects or plans which, in combination with this proposed development, could impact on any European sites.

As noted already assessment and monitoring results from nearby windfarms should be considered in detail. Cumulative impact from all windfarms in the area needs to be assessed and the data from surrounding sites needs to be considered in the assessment of impacts.

4. Post construction monitoring

This Department recognises the importance of pre and post construction monitoring, such as recommended in Drewitt et al. (2006), and Bat Conservation Ireland (2012). The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment. Please refer to Circular Letter PD 2/07 and NPWS 1/07 on this issue. This can be downloaded from the Department's website <https://www.npws.ie/development-consultations>.

The EIAR process should identify any pre and post construction monitoring which should be carried out. The post construction monitoring should include bird and bat strikes/fatalities including the impact on any such results of the removal of carcasses by scavengers. Monitoring results should be made available to the competent authority and copied to this Department. An appropriate plan of action needs to be agreed at planning stage with the Planning Authority if the results in future show a significant mortality of birds and/or bat species. It is important to note that unless post decision consultation with NPWS is specifically stated as a condition of planning, NPWS has no post consent role. However, regional staff are available for liaison regarding any associated licencing requirements and or new information arising for specific species of concern.



Note: any significant change to mitigation may require amendment and where a licence has expired; there will be a need for new licence applications for protected species.

5. Licenses

Where there are impacts on protected species and their habitats, resting or breeding places, licenses may be required under the Wildlife Act 1976-2018 or derogations under the EC (Birds and Natural Habitats) Regulations 2011, as amended.

In particular, bats as outlined earlier and otters, are subject to a regime of strict protection pursuant to the requirements of the Habitats Directive (92/43/EEC) as transposed in Irish law in Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended). A copy of Circular Letter NPWS 2/07 entitled “Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species/applications for derogation licences” can be found on the Departmental web site at www.npws.ie/sites/default/files/general/circular-npws-02-07.pdf. It should be noted that the Regulations of 1997 have since been superseded by the European Communities (Birds and Natural Habitats) Regulations 2011, as amended. Part 6 of those Regulations is now the relevant section dealing with the protection of flora and fauna. Reference to Regulation 23 in the circular letter should be taken to mean Regulation 51 in the current Regulations.

In addition, the EIAR should take account of species protected under sections 21, 22 and 23 of the Wildlife Acts if there are any impacts on other protected species or their resting or breeding places, such as on protected plants, badger setts or birds’ nests. The EIAR will also need to be cognisant of article 5 (d) of the Birds Directive. For that reason, vegetation on lands not then cultivated and vegetation growing on hedges and including trees should not be removed during the nesting season (i.e. March 1st to August 31st) under the terms of Section 40 and 22 of the Wildlife Acts.

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.

Appendix 1

Additional Guidance and References

1. The Departmental Wind Energy Planning Guidelines
2. Windfarms on Peatland (2008-2010) Mires and Peat volume 4.



3. Best Practice guidance for Habitat Survey and Mapping by George F Smith, Paul O'Donoghue, Katie O'Hora and Eamon Delaney, 2011. The Heritage Council.
4. Pearce-Higgins, James W., Stephen, Leigh, Langston, Rowena H. W., Bainbridge, Ian P. and Bullman. Rhys (2009). "The distribution of breeding birds around upland wind farms". *Journal of Applied Ecology*, 46, p1323-1331.
5. Johnson, Gregory D. and Arnett Edward 8. "A Bibliography of Bat Fatality Activity and Interactions with Wind Turbines" (June 2004 updated February 2010) Bat Conservation International.
6. Pearce-Higgins, James W., Stephen, Leigh, Douse, Andy, and Langston, Rowena H. W. (2012). "Greater impacts of wind farms on bird populations during construction than subsequent operation: results of a multisite and multi-species analysis". *Journal of Applied Ecology*. 49. p386-394.
7. Rodrigues, Let ai, (2014). "Guidelines for consideration of bats in wind farm projects". Eurobats Publication Series NO.6 UNEP and Eurobats.
8. The Departmental guidance document on Appropriate Assessment which is available on the NPWS web site at <https://www.npws.ie/protected-sites/guidance-appropriate-assessment-planning-authorities>
9. The EU Commission guidance entitled "Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC" which can be downloaded from http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm
10. Bat Conservation Ireland (2012) Wind Turbine/Wind Farm Development Bat Survey Guidelines. Version 2.8, December 2012.
11. Drewitt, Allan Land Longston Rowena H. W. (2006) "Assessing the impacts of wind farms on birds". *Ibis* 148. p29-42.
12. <https://cieem.net/resource/cieem-webinar-patterns-of-bat-activity-at-upland-windfarms-implications-for-sampling-and-mitigation/>
13. May R, Nygård T, Falkdalen U, Åström J, Hamre Ø, Stokke BG. Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities. *Ecol Evol*. 2020;00:1–9. <https://doi.org/10.1002/ece3.6592>
14. Hardey J, Crick H, Wernham C, Riley H, Etheridge B and Thompson D. (2009). *Raptors: A Field Guide to Survey and Monitoring*, 2nd Edition. TSO, Edinburgh.
15. Hötker, H., Krone, O. & Nehls, G. (2013): Greifvögel und Windkraftanlagen: Problemanalyse und Lösungsvorschläge. Schlussbericht für das Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit. Michael-Otto-Institut im NABU, Leibniz-Institut für Zoo- und Wildtierforschung, BioConsult SH, Bergenhusen, Berlin, Husum.



16. NPWS Circular Letters (available from www.npws.ie)
17. Circular Letter NPWS 2/07: Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – Strict Protection of Certain Species/Derogation Licences.
18. Circular Letter PD 2/07 and NPWS 1/07: Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites
19. Circular NPWS 1/10 & PSSP 2/10: Appropriate Assessment under Article 6 of the Habitats Directive: guidance for Planning Authorities

Appendix 2

Notes on the preparation and content of an NIS

The term 'NIS' is defined in legislation⁹. 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.

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:

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;
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;
3. The scientific basis on which sites and their conservation objectives are included or excluded from assessment and analysis should be presented and justified;

⁹ The term, 'NIS', is defined in the European Communities (Birds and Natural Habitats) Regulations, 2011, and Part XAB, Section 177T of the Planning and Development Act, 2000 as amended



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;
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;
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;
7. An NIS should be informed by any necessary hydrological, hydrogeological or geotechnical investigations to assess impacts on habitat structure and function;
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;

You are requested to send further communications to the Development Applications Unit (DAU) at manager.dau@chg.gov.ie, or to the following address:

The Manager
Development Applications Unit (DAU)
Government Offices
Newtown Road
Wexford
Y35 AP90



Is mise, le meas

Diarmuid Buttiner
Development Applications Unit

14. Department of Defence

We wish to acknowledge receipt of your e-mail and attached documentation.
We will consult with our military colleagues on this proposed development and revert in due course.

Best regards
Don Watchorn
Property Management Branch
An Roinn Cosanta
Department of Defence

17. EIR

Thanks for the information provided on this project. Please provide exact turbine location details in Irish Grid format when they are available.

Regards,
Thomas Sheridan

20. Environmental Protection Agency

Re: Scoping Opinion under Article 5(2) of Directive 2011/92/EU as amended by Directive 2014/52/EU (EIA Directive)

Dear Sir /Madam,

I refer to the scoping request for Oweninny Wind Farm Phase 3 at Bellacorick, Co. Mayo received by the Agency 03/02/2021. In accordance with the requirements of Article 5 (2) of Directive 2011/92/EU as amended by Directive 2014/52/EU *on the assessment of the effects of certain public and private projects on the environment* (EIA Directive), the Agency has consulted with the Planning Authority and the relevant prescribed bodies under Section 89 of the EPA Act. I attach copies of the responses received from the Health Service Executive (HSE), Inland Fisheries Ireland, Department of Agriculture, Food & the Marine and Development Applications Unit (Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media).

It should be noted that Bord na Móna Energy Limited, Oweninny Group, c/o Oweninny Works, Bellacorick, Ballina, Mayo was issued an IPC Licence (Register No. P0505) on 18th May 2000 for Class 1.4 of the First Schedule of the EPA Act 1992 '*the extraction of peat in the course of business which involves an area exceeding 50 hectares*'. The licence may need to be reviewed or amended to accommodate the proposed development.

Having regard to the specific characteristics of the project, including location and technical capacity, and likely impact on the environment, the Agency is of the opinion that the scope and level of detail to be included in the environmental impact assessment report should as a minimum:

- (i) identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of a project on each of the factors listed in Article 3 of the EIA Directive;
- (ii) address the matters raised in the responses received from the bodies detailed above;
- (iii) have regard to the rehabilitation plan(s) required under Condition 10 of Licence Reg No. P0505 for any bog areas relevant to the proposed development;
- (iv) have regard to the requirements of the draft *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, as appropriate;
- (v) have regard to the relevant topics contained in the EPA's *Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)* September 2003;
- (vi) satisfy the requirements of the EIA Directive.

If you require any further information in relation to this matter, please contact the undersigned.

For all further queries and correspondence relating to planning and EIA matters, please contact eiaplanning@epa.ie

Yours faithfully,

Environmental Licensing Programme
Office of Environmental Sustainability
Tel: 053-9160600

23. Fáilte Ireland

Thank you for your email and the copy of the EIA Scoping Report.

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 Oweninny Wind Farm Phase 3 at Bellacorick, Co. Mayo. 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.

Regards,

Yvonne Jackson
Product Development-Environment & Planning Support

25. Geological Survey of Ireland



Brian Gallagher
TOBIN Consulting Engineers
Market Square
Castlebar
Co. Mayo F23 Y427

10 February 2021

Re: Oweninny Wind Farm Phase 3 - EIA Scoping Report

Your Ref: n/a

Our Ref: 21/37

Geological Survey Ireland is the national earth science agency and has datasets including Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources, Geohazards and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our [website](#) for data availability and we recommend using these various data sets, when undergoing the EIAR, planning and scoping processes. Geological Survey Ireland should be referenced to as such and should any data or geological maps be used, they should be attributed correctly to Geological Survey Ireland.

Dear Mr. Gallagher,

With reference to your email dated 03 February 2021, concerning the Oweninny Wind Farm Phase 3 - EIA Scoping Report, Geological Survey Ireland (a division of the Department of the Environment, Climate and Communications) would like to make the following comments.

Geoheritage

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Housing, Local Government and Heritage), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGS), as adopted under the National Heritage Plan, include additional sites that may also be of national importance, but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by GSI are categorised as CGS pending any further NHA designation by NPWS. CGS 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](#).

The audit of County Geological Sites of County Mayo was completed in 2014, revised in 2019 and published in November 2020. The full report details can be found [here](#). **Our records show that there is a CGS in the vicinity of the proposed wind farm development.**

Bellacorick, Co. Mayo (GR 97105, 320310), under IGH theme: IGH14 Fluvial and Lacustrine Geomorphology. Link to site report [MO011](#). The site comprises extensive Holocene age (post-Ice Age) meandering river channels and Atlantic blanket bog, overlying glacial till (Quaternary) and calcareous sandstones of the Downpatrick Formation (Carboniferous age). The site comprises river channels within an area of blanket bog that exhibit irregular and deranged meandering patterns.



While it is recognised that the Bellacorick area occupies an important place in the development of Ireland's renewable energy industry, any future wind-farm development in the surrounding area poses a threat to the integrity of the site. This site should be assessed as an environmental constraint. Ideally, the site should not be damaged or integrity impacted or reduced in any manner due to the proposed development, including secondary impacts that may be related to altered drainage patterns, changes in soil profiles and structures, construction of temporary and permanent access roads and so on as a result of the development. However, this is not always possible, and in this situation appropriate mitigation measures should be put in place to minimize or mitigate potential impacts.

We would also ask that the design of any future development considers the use of information panels as appropriate to highlight the significance of the impacted CGS. Please contact Clare Glanville (Clare.Glanville@gsi.ie) for further information and possible mitigation measures if applicable.

Groundwater

Groundwater is important as a source of drinking water, and it supports river flows, lake levels and ecosystems. It contains natural substances dissolved from the soils and rocks that it flows through, and can also be contaminated by human actions on the land surface. As a clean, but vulnerable, resource, groundwater needs to be understood, managed and protected.

Geological Survey Ireland's [Groundwater Programme](#), provides advice and maps relating to groundwater quality, quantity and distribution to members of the public, consultancies and public bodies. The Groundwater Programme monitors groundwater nationwide by characterising aquifers, investigating karst landscapes and landforms and by helping to protect public and group scheme water supplies. We recommend using the Geological Survey Ireland's National Aquifer and Recharge maps on our [Map viewer](#) to this end.

Our Groundwater programme run [GWClimate](#) which is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans (see geohazards below). Groundwater Programme maps and data are available on the [Map viewer](#).

Geological Mapping

Geological Survey Ireland (GSI) maintains online datasets of bedrock and subsoils geological mapping that is reliable, accessible and meets the requirements of all users including depth to bedrock and physiographic maps. These datasets include depth to bedrock data and subsoil classifications. We would encourage you to use these data which can be found [here](#), in your future assessments.

Geohazards

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides are the most prevalent of these hazards. Geological Survey Ireland has information available on past landslides for viewing as a layer on our [Map Viewer](#). Geological Survey Ireland also engages in national projects such as Landslide Susceptibility Mapping and GWFlood Groundwater Flooding. 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.



Natural Resources (Minerals/Aggregates)

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. Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our [Minerals section](#) of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our [Map Viewer](#).

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 development are sustainably sourced from properly recognised and licensed facilities.

Geotechnical Database Resources

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.

Other Comments

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.

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 Beatriz Mozo, Land Mapping Unit, at Beatriz.Mozo@gsi.ie, 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me (Trish.Smullen@gsi.ie), or my colleague Clare Glanville (Clare.Glanville@gsi.ie).

Yours sincerely,

Trish Smullen
Geoheritage Programme
Geological Survey Ireland

26. Health Service Executive



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

An tSeirbhís Sláinte Chomhshaoil
Feidhmeannacht na Seirbhíse Sláinte (Iarthar)
Ceanncheathrú Naomh Muire
Caisleán an Bharraigh
Contae Mhaigh Eo

Environmental Health Service
HSE West
St. Mary's Headquarters
Castlebar
Co. Mayo

☎ (094) 90 42260 / 90 42105
📠 (094) 90 27312

26th February 2021

EIA Planning,
Environmental Protection Agency,
Johnstown Castle Estate,
Co. Wexford.

Re: Scoping Consultation under Article 5 (2) of Directive 2014/52/EU
(EIA Directive)

Proposed development: Proposed Oweninny Wind Farm Phase 3, Bellacorick, Co. Mayo

Applicant: Bord na Mona Powergen Limited

EHIS Reference: 1608

Dear Sir/Madam

Please find enclosed the HSE Consultation Report in relation to the above proposal.

The following HSE departments were made aware of the consultation request for the proposed development on February 18th 2021

- Emergency Planning – Kay Kennington
- Estates – Helen Maher
- Assistant National Director for Health Protection – Kevin Kelleher/ Laura Murphy
- CHO – Breda Crehan-Roche

If you have any queries regarding this report the initial point of contact is Ms Maria Horkan, Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours sincerely,

Maria Horkan
Principal Environmental Health Officer

HSE EIA Scoping

Environmental Health Service Submission Report

Date: February 26th 2021

Our reference: EHS 1608

Report to: EIA Planning, Environmental Protection Agency,
Johnstown Castle Estate Co. Wexford

Type of Consultation: Scoping Consultation under Article 5 (2) of Directive 2014/52/EU
(EIA Directive)

Proposed development: Oweninny Wind Farm Phase 3, Bellacorick, Co. Mayo

Applicant: Bord na Mona Powergen Ltd

Proposed Development: A wind energy development of between 10 and 20 wind turbines with an approximate capacity of 90 megawatts and a maximum blade tip height of 200m. The proposed development will be located in the townlands of Laghtanvack, Croaghaun (also known as Croaghaun West), Moneynieran, Corvoderry, Shanvolahan, Dooleeg More and Shanvodinnaun, Co. Mayo. The site study area of the proposed development is approximately 2,345 hectares.

General Introduction

The following documents should be taken into consideration when preparing the Environmental Impact Assessment Report:

- Guidelines on the information to be contained in EIS (2002), 187kb
- Advice Notes on Current Practice in the preparation of EIS (2003), 435kb
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanála_on_carrying_out_eia_-_august_2018.pdf

EU publication: Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report, EU, 2017

http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

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:

<http://www.epa.ie/pubs/consultation/reviewofdraftteisguidelinesadvicenotes>

Generally the Environmental Impact Assessment should examine all likely significant impacts and provide the following information for each:

- a) Description of the receiving environment;
- b) The nature and scale of the impact;
- c) An assessment of the significance of the impact;
- d) Proposed mitigation measures;
- e) Residual impacts.

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 www.publichealth.ie

Consideration should be given to the issues covered in the Draft Revised Wind Energy Guidelines which were published in December 2019. Although these Draft Guidelines have yet to be adopted, they aim to address concerns that communities have regarding wind energy development and the potential impacts on their health from such developments. Therefore the Environmental Health Service considers that it is reasonable for these draft guidelines to be considered in the EIAR.

In addition to any likely significant negative impacts from the proposed development, any positive likely significant impacts should also be assessed.

The HSE will consider the final EIAR accompanying the SID/ planning application and will make comments to the relevant planning authority on the methodology used for assessing the likely significant impacts and the evaluation criteria used in assessing the significance of the impact.

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 February 17th 2021.

The Environmental Health Service (EHS) recommends that the following matters are included and assessed in the EIAR

- Public Consultation
- Decommissioning phase.

- Siting and location of turbines
- Opportunity for Health Gain
- Noise & Vibration
- Shadow Flicker
- Air Quality
- Surface and Groundwater Quality
- Geological Impacts
- Ancillary facilities
- Cumulative impacts

It is noted that, subject to review as part of the design and EIA process, the proposed wind turbines may have a maximum blade tip height of 200m, making them amongst the tallest in Ireland. All assessments relating to land and soils (including peat stability), hydrology and hydrogeology, noise and vibration, shadow flicker and cumulative impacts should detail all potential impacts specifically arising from wind turbines of this height.

Public Consultation

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.

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.

It is acknowledged that current restrictions around public gatherings as a result of Covid 19 prevention measures will 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.

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.

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 the website.

The Environmental Health Service would prefer to receive planning and EIAR documentation electronically by USB if possible.

Decommissioning Phase

The proposed development should have a clear life span and the EIAR should indicate the estimated operational phase of the wind farm, how and when it will be decommissioned and any proposals for the future use of the site. Information should be included on the use of decommissioned materials (rotor blades, nacelle and tower) and on proposals for the removal, disposal or otherwise of the foundations

Siting, Location and details of Turbines

The EIAR should include a map and a description of the proposed location of each of the proposed wind turbines.

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. If this is not possible the make and model of the actual turbine selected should be as close as possible to the specification used in any noise or shadow flicker assessment undertaken as part of the EIA process.

Details of turbine foundation structures, including depth, quantity and material to be used should be included in the EIAR.

Opportunity for Health Gain

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.

Assessment of Consideration of Alternatives

The EIAR should consider an assessment of alternatives. The EHS recommends that alternative renewable energy options to on shore wind farms should be assessed as part of the EIAR.

Noise & Vibration

The potential impacts for noise and vibration from the proposed development on all noise sensitive locations must be clearly identified in the EIAR. The EIAR must also consider the appropriateness and effectiveness of all proposed mitigation measures to minimise noise and vibration.

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 back ground levels.

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.

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.

https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft_revised_wind_energy_development_guidelines_december_2019.pdf

Shadow Flicker

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.

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.

Air Quality

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:

- Sweeping of hard road surfaces
- Provision of a water bowser on site, regular spraying of haul roads
- Wheel washing facilities at site exit
- Restrict speed on site
- Provide covers to all delivery trucks to minimise dust generation
- Inspect and clean public roads in the vicinity if necessary
- Material stockpiling provided with adequate protection from the wind
- Dust monitoring at the site boundary
- Truck inspection and maintenance plan

- 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.

Surface and Ground Water Quality

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. 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.

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.

Geological impacts

A detailed assessment of the current ground stability of the site for the proposed wind farm 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.

Information should be provided on the make and model of the turbines and on construction details for the turbine foundations, including the depth and volume of concrete required. An accurate assessment of the potential impacts of the foundations on water quality and peat stability cannot be undertaken without this information.

Reference is made to a peat slide which occurred near Ballybofey in Co. Donegal on November 13th 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.

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)

<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>

Ancillary Facilities

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.

Cumulative Impacts

All existing or proposed wind farm developments in the vicinity should be clearly identified in the EIAR.

The impact on sensitive receptors of the proposed development combined with any 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.

The EIAR should state clearly if there is any future proposal to extend the proposed Oweninny Wind Farm Phase 3.

Yours sincerely,



Evelyn Keane
Environmental Health Officer
Mayo EHS



Environmental Health Officer
Environment OU
Ennistymon Health Centre
Ennistymon
Co. Clare

28. Imagine Network Services

Imagine Group acknowledge receipt of this scoping report.

Kind Regards,

Paul Brunel.
Transmission Planning.
Imagine Group.

29. Inland Fisheries Ireland

Environmental Licensing Programme
Office of Environmental Sustainability
PO Box 3000,
Johnstown Castle Estate,
Co Wexford



**Iascach Intíre Éireann
Inland Fisheries Ireland**

25th February 2021

Re: Scoping Consultation under Article 5(2) of Directive 2014/52/EU (EIA Directive)

Dear Sir/Madam,

Inland Fisheries Ireland (IFI) is the state body responsible for the protection, management and conservation of the inland fisheries and sea angling resource in Ireland. Protection of the aquatic environment and habitat is a vitally important element of IFI's work.

The proposed site crosses three catchments; the Oweninny River, the Shanvolahan River and the Cloonaghmore River. All three rivers provide valuable salmon and trout habitat.

The Oweninny River is a major tributary of the Owenmore River which is a valuable salmon, sea trout and brown trout fishery. IFI installed a fish counter on the Owenmore River at Bangor Erris to support sustainable fisheries management. Fish stock monitoring has shown this catchment is under environmental pressure with salmon stocks declining to below their conservation limit; the number of adult salmon returning to the river to spawn, required for a sustainable fishery. As a result the fishery was closed to exploitation for commercial and recreational angling for a period of two years. Salmon stocks have recovered sufficiently to allow the fishery to reopen in 2021, for limited exploitation. It is imperative that no activity or development is permitted in this catchment that may negatively impact on the Owenmore River system, aquatic habitat or water quality. The Oweninny River is a spate river which provides important spawning and nursery habitat for sea trout, brown trout and salmon. The Oweninny River has been allocated high ecological status in the River Basin Management Plan and this status must be protected.

The Muing River is a smaller tributary of the Owenmore River which flows from Lough Dahybaun and the Lough Dahybaun Special Area of Conservation. The Muing River provides juvenile and spawning habitat for salmon and trout and Lough Dahybaun provides habitat for brown trout. The Muing River has been allocated good ecological status in the River Basin Management Plan but Lough Dahybaun has not been assigned a status.

The Cloonaghmore River provides spawning and nursery habitat for salmon, brown trout and sea trout. This catchment is under environmental pressure with salmon stocks below their conservation limit. As a result the fishery is open on a catch and release basis only. This catchment has been allocated good ecological status in the River Basin Management plan and this status must be protected.

In the past the aquatic habitat particularly salmon and trout spawning beds were significantly impacted by peat harvesting activities at the Bellacorick site. Peat sediment covered salmonid spawning gravels smothering fish eggs and making the gravels inaccessible to adult fish. As a result of this damage the Owenmore River and the Cloonaghmore River salmon stocks declined and both fisheries were closed to angling. Habitat monitoring and restoration projects were carried out in Oweninny River, Muing River and Cloonaghmore River catchments with deposited peat material removed from above gravel spawning beds on the Cloonaghmore River. These conservation measures resulted in the Owenmore River fishery reopening but the Cloonaghmore River remains closed to exploitation.



Iascach Intíre Éireann
Inland Fisheries Ireland

The Shanvolahan River provides salmon and trout spawning and nursery habitat and is a tributary of the Deel River. The Deel River is a popular salmon, sea trout and brown trout fishery and provides important salmonid spawning habitat for Lough Conn and the wider River Moy system. The Deel River forms part of the River Moy Special Area of Conservation which is designated for the protection of Atlantic salmon, white-clawed crayfish and lamprey species. The Shanvolahan River is under environmental pressure and has been allocated moderate ecological status in the River Basin Management Plan. This status must be improved to good. This catchment has also been identified as at risk of not achieving this status due to extractive activities or peat harvesting, altered hydromorphology and forestry activities within the catchment. This risk must be addressed where any of these activities are proposed.

The EIS should assess the potential impacts the proposed development may have including, damage to the aquatic and associated riparian habitat, pollution of water, introduction of non-native species and interference with upstream and downstream movement of aquatic life. The assessment should include all aspects of the development, forestry, roads, borrow pits, grid connection etc.

Please find below IFI recommendations in relation to the proposed windfarm development EIA:

1. All watercourses that will receive drainage from the construction site including the turbines or the access roads must be assessed in terms of aquatic biodiversity with particular emphasis on fish, the food of fish, spawning grounds and fish habitat in general. Invertebrate sampling is also recommended.
2. Electrofishing surveys will be required for all waters. Quantitative data in relation to all fish species should be compiled. The presence of salmonid species, crayfish and lamprey species should be assessed. Appropriate permits for electrofishing must be obtained from the Department of Communications, Energy and Natural Resources. Authorised personnel must ensure that they comply with all the conditions contained in the permit
3. The aquatic habitat and physical nature of any watercourse affected by the development must be fully described in detail. This includes areas of open water, pool riffle glide sequences, density and types of aquatic vegetation, description of riparian zones to depth of at least 10 metres on either bank etc. The extent of the surveys should be sufficiently long enough so as to be representative of the habitat contained in that watercourse. There should be a particular focus on sections upstream and downstream of any point where an impact on the watercourse is likely to arise. Surveys of un-impacted (control) streams should also be included in the Environmental Impact Assessment.
4. A construction and operational phase water quality and habitat monitoring programme must be put in place.
5. The riparian habitat is integral to the functioning of the aquatic environment. The potential impacts of the development on the riparian habitat should be assessed. Adequately sized aquatic buffer zones must be established along all watercourses. IFI recommends a minimum width of 15metres from a minor watercourse to low risk parts of the construction site with larger buffer zones required for more sensitive habitats and higher risk operations.
6. A detailed geotechnical survey must be carried out and the potential for soil movement and landslides should be assessed fully for all areas of the site and all proposed activities



7. including borrow pits, peat deposition sites, settlement ponds, turbines and access roads. The impact these works will have either directly or by vibration on the stability of the soils.
8. Assessment of the impacts on the hydrology of the site must be carried out particularly where excavations including excavations for road construction are being proposed. It is important that natural flow paths are not interrupted or diverted in such a manner as to give rise to erosion. The proposed site crosses three catchments there must be no diversion of waters from one catchment into another.
9. The impact of site drainage must be assessed including the pumping of waters from excavations such as turbine excavations. Settlement ponds and other silt treatment/mitigation measures must be engineered to ensure sufficient retention times are provided for sediment settlement. The silt traps should be designed to minimise the movement of silt especially during intense precipitation events where silt traps maybe hydraulically overloaded. It is essential that they are located with good access to facilitate monitoring, sampling and maintenance. A license to discharge to waters may be required from the local authority.
10. Road construction and surfacing materials used must be of adequate strength so as not to give rise to silt/fine solids discharges due to the action of traffic and erosion.
11. Watercourse crossings existing on site or along the proposed delivery routes must be assessed to determine if works will be required to facilitate site access and the potential impacts of such works. The locations and design of any proposed new watercourse crossings should be provided. IFI requests consultation in relation to the design; length, slope and width of any instream structure, temporary or permanent. Clear span structures such as Bailey bridges should be used where possible. There must be no negative impact on fish passage as a result of the proposed development.
12. All instream works or other works which may impact directly on a watercourse should only be carried out during the open season which is from 1st July to 30th of September (so as to avoid impacting on the aquatic habitat during the spawning season.) It would be important that this is included in the contract for construction.
13. The impact of site offices and the services should form part of the EIA. Details should be provided in relation to the management of construction phase pollutants including cement waste, such as cement truck wash out, hydrocarbons and any other toxic materials.
14. Should works be approved a detailed method statement addressing the issues outlined above, including all mitigations measures, precautions and environmental incident procedures must be forwarded to Inland Fisheries Ireland before works commence
15. There must be no spread of invasive species as a result of the proposed development. A survey for the presence of invasive species should be carried out and a management plan put in place where found.
16. The IFI publication: Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites should be followed. <https://www.fisheriesireland.ie/documents/624-guidelines-on-protection-of-fisheries-during-construction-works-in-and-adjacent-to-waters/file.html>



Iascach Intíre Éireann
Inland Fisheries Ireland

In summary IFI request the following to be addressed:

- Water quality
- Surface water hydrology
- Fish spawning and nursery areas
- Passage of migratory fish
- Areas of natural heritage importance
- Biological diversity
- Ecosystem structure and functioning
- Sport and commercial fishing and angling
- Sediment transport

IFI looks forward to further consultation in relation to this development in due course.

Yours sincerely

Aisling Donegan
Senior Fisheries Environmental Officer

epa-o-wf-0221

30. Irish Aviation Authority

The Irish Aviation Authority (IAA) Safety Regulation Division (SRD) does not get involved in the planning process. The IAA SRD is to be notified as detailed hereafter:

According to [S.I. 215 of 2005, Irish Aviation Authority \(Obstacles to Aircraft in Flight\)](#), the IAA SRD requires any person who seeks to erect a manmade object to notify the aerodrome operator of the intended operation **at least thirty days** 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.

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 SRD of the intended crane erection **at least thirty days** in advance, as a crane operating at or above this height may constitute an obstacle to air navigation. The IAA SRD can be contacted via airspace@iaa.ie.

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 airspace@iaa.ie:

- The WGS84 coordinates (In degrees, minutes and seconds) for each turbine?
- Height above ground level (to blade tip) and elevation above mean sea level (to blade tip)?
- Verification if it's a standalone wind farm or is merged with others. Does the wind farm have any alternative names?
- Horizontal extent (rotor diameter) of turbines and blade length where applicable?
- Lighting of the wind farm, which turbine(s) is/are lit, and what type of lighting?

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

Kind regards,

Audrey Rafferty
Corporate Affairs
Irish Aviation Authority
11-12 Dolier Street
Dublin 2.

35. Irish Water

Tobin Consulting Engineers,
Market St,
Garryduff,
Castlebar.
Co. Mayo

Uisce Éireann
Bosca OP 6000
Baile Átha Cliath 1
D01 WA07
Éire

Irish Water
PO Box 6000
Dublin 1
D01 WA07
Ireland

T: +353 01 89 25000
T: +353 01 89 25001
www.water.ie

19th February 2021

Re: EIAR Scoping Request – Oweninny Wind Farm Phase 3, Bellacorick, Co. Mayo

Dear Mr Gallagher,

Irish Water (IW) acknowledges receipt of your request in respect of the Environmental Impact Assessment Report (EIAR) scoping for the above proposed development in Co. Mayo.

Please see attached our suggested scope in relation to Water Services. On receipt of the planning referral, Irish Water will review the EIAR as part of the planning process

Queries relating to the terms and observations above should be directed to planning@water.ie

Yours sincerely,

Signed on behalf of Irish Water:

PP: Ali Robinson

Yvonne Harris
Connections and Development Services

Response to EIAR Scoping Report Requests

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;

- a) 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 <https://www.water.ie/connections/get-connected/>
- b) Where the development proposal has the potential to impact an IW Drinking Water Source 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. It is a requirement of the Water Framework Directive that waters used for the abstraction of drinking water are protected so as to avoid deterioration in quality.
- c) Any up-grading of water services infrastructure that would be required to accommodate the development.
- d) 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
- e) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks & potential measures to minimise/stop surface waters from combined sewers
- f) Any physical impact on IW assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets
- g) If you are considering a development proposal, it is best practice to contact us in advance of designing your proposal to determine the location of public water services assets. Details, where known, can be obtained by emailing an Ordinance Survey map identifying the proposed location of your intended development to datarequests@water.ie. 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.
- h) Any potential impacts on the assimilative capacity of receiving waters in relation to IW discharge outfalls including changes in dispersion /circulation characterises
- i) 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.

- j) Where a development proposes to connect to an IW network and that network either abstracts water from or discharges waste water to a “protected”/sensitive area, consideration as to whether the integrity of the site/conservation objectives of the site would be compromised.

- k) Mitigation measures in relation to any of the above

This is not an exhaustive list.

Please note

- The Confirmation of Feasibility from IW, to the applicant, should be issued prior to applying for planning permission.
- Irish Water will not accept new surface water discharges to combined sewer #networks

37. Knock Airport

Thank you for contacting Ireland West Airport Knock.

For specific queries please contact the relevant department using the contact details below.

48. Office of Public Works

Thank you for your email to the Office of Public Works.

Your query has been forwarded to the relevant section within the OPW for direct reply. If you do not receive a response within 20 working days, please email this address again for further assistance.

51. RTE NL / 2RN

Do you have a SHP or KML/KMZ file with the extents of the new site and any idea of the hub and tip height of the turbines that may be used?

58. Towercom Ltd.

Thanks for your email yesterday.

Please find attached image identifying the routes of existing links from the Towercom infrastructure at Shanettra in relation to the proposed Oweninny Wind Farm – Phase 3.

Kind regards
Laura O'Connell
Planner

61. Virgin Media

Virgin Media do not have microwave links that would be effected by the proposed development Oweninny Wind Farm Phase 3 at Bellacorick, Co. Mayo as shown.

Regards,
Liam Allister, B2B Access Network Transmission Engineer, Virgin Media, John F Connelly Road,
Churchfield, Cork.