

Appendix I. Ecology

I.1. Natura Impact Statement - Screening Stage Assessment

I.1.1. Introduction

This Natura Impact Statement includes a screening stage. It is an Appendix Report (Appendix I) to the *Phase One Lead Consultant's Site and Corridor Identification Report* for a proposed 220/110 kV station and associated transmission infrastructure near Millstreet, County Cork.

Department of Environment Heritage and Local Government (DoEHLG) guidelines have clarified the requirement for Appropriate Assessment reporting to consider the possible nature conservation implications of any plan or project which may possibly impact a European Designated (NATURA 2000) Site which include candidate Special Areas for Conservation (cSAC) and / or Special Protection Areas for Birds (SPA).

This report details the screening stage of the Appropriate Assessment process. The aim of this process is to highlight potential impacts to sensitive ecological receptors in designated sites possibly linked to the proposed development including all OHL and UGC options. Refer to Table I.1 for a list of designated sites located in close proximity to the study area. Sensitive receptors in these sites which may possibly be impacted by this development are therefore considered.

This Appropriate Assessment was carried out by an experienced Ecologist from TOBIN Consulting Engineers.

I.1.2. Legislative Context

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora - '*The Habitats Directive*', has been transposed into Irish law by The European Community (Natural Habitats) Regulations 1997 (S.I. No. 94/1997). The 1997 Regulations were updated in 1998 by The European Communities (Natural Habitats) (Amendment) Regulations 1998 (S.I. No. 233/1998) to include Council Directive 97/62/EC which served to update Council Directive 92/43/EEC, adapting it to technical and scientific progress made in the intervening years.

The 1997 Regulations were again updated in 2005, by The European Communities (Natural Habitats) (Amendment) Regulations 2005 (S.I. No. 378/2005). This amendment served to consolidate the main nature conservation legislation enacted in Ireland, meaning The Wildlife Act 1976, The Wildlife (Amendment) Act 2000, The European Communities (Natural Habitats) Regulations 1997, The European Communities (Natural Habitats) (Amendment) Regulations 1998, and to draw direct reference upon Council Directive 79/409/EC on the conservation of wild birds – '*The Birds Directive*'.

The Birds Directive seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs) whereas the Habitats Directive does the same for habitats and other species groups with Special Areas of Conservation (SACs). It lists certain rare habitats (Annex I) and species (Annex II) whose conservation is of community interest. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected areas throughout the European Community.

The legislation detailing the requirement for an Appropriate Assessment is detailed in Article 6, paragraphs 3 and 4 of the Habitats Directive which states that:

"6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after

having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

Guidance

This Natura Impact Statement has been carried out using the following guidance:

- “Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, Environment, Heritage and Local Government (December 2009)”;
- EPA Ireland guidelines “Waste Water Licensing Appropriate Assessment Guidance Notes” (2009)¹;
- *“Guidance document on Article 6(4) of the ‘Habitats Directive’ 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg (EC 2007)”*;
- *“Assessing Development Plans in Terms of the Need for Appropriate Assessment: Interim Guidance. Scottish Executive and Scottish Natural Heritage (2006) ²”*;
- *“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, Office for Official Publications of the European Communities, Luxembourg (EC 2001)”*; and
- *“Managing Natura 2000 Sites: the provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC 2000)”*.

Based on these documents, the assessment procedure as detailed in the guidelines is a four stage approach consisting of the following stages:

Stage One: Screening / Test of Significance - this process identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. This stage only is detailed in this report.

Stage Two: Appropriate Assessment - the consideration of the impact of the project or plan on the integrity of the Natura 2000 site, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts is detailed. If adverse impacts can be satisfactorily avoided at this stage then the process is complete.

¹ <http://www.epa.ie/downloads/forms/lic/wwwda>

² <http://www.scotland.gov.uk/Publications/2006/06/02093425/0>

Stage Three: Assessment of Alternative Solutions – the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage Four: Assessment Where Adverse Impacts Remain - an assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Overriding Public Interest (IROPI), it is deemed that the project or plan should proceed.

I.1.3. Stage 1 – Screening

Introduction

This stage of the process identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Description of Study Area

The study area lies approximately 4 kilometres south of Millstreet, County Cork and is dissected by the R582 road. It is approximately 9 square kilometres in area and is located on the eastern edge of the Derrynasaggart Mountains. It is proposed to locate a new 220/110 kV station and associated transmission line infrastructure within this area.

Relevant Natura 2000 Sites

Mullaghanish to Musheramore Mountains Special Protection Area (SPA) is located along the southern boundary of the study area. Other sites and this SPA within 10 kilometres of the study area are detailed in the table below.

Table I.1: Relevant Natura 2000 Sites

Name	Designation	Distance from study area (Km)
Mullaghanish Bog	SAC	1.0
St. Gobnet's Wood	SAC	5.3
Killarney National Park, Macgillicuddy's Reeks And Caragh River Catchment	SAC	1.5
Blackwater River (Cork/Waterford)	SAC	1.5
Mullaghanish to Musheramore Mountains	SPA	0.0 - The boundary of this SPA is located immediately adjacent the southern boundary of the study area.

The Mullaghanish to Musheramore Mountains SPA (site code 004162) and Blackwater River (Cork / Waterford) (Site code- 002170) are considered to be the only Natura 2000 sites, which may possibly be impacted by the proposed development.

The Mullaghanish to Musheramore Mountains SPA has been primarily designated as a foraging and breeding site for the Annex 1 Listed (Birds Directive) raptor species; hen harrier.

The Finnow River drains the study area and ultimately drains into the Blackwater River downstream. The Blackwater River (Site Code 002170) has been designated a candidate Special Area of Conservation (cSAC), which has the same level of protection as an SAC, however, it has not yet been formally ratified by the Minister of the Environment.

The Blackwater River cSAC key qualifying interests include:

- Priority habitats listed on Annex I of the E.U. Habitats Directive: alluvial wet woodlands and Yew wood.
- Habitats listed on Annex I of the E.U. Habitats Directive: floating river vegetation, estuaries, tidal mudflats, *Salicornia* mudflats, Atlantic salt meadows, Mediterranean salt meadows, perennial vegetation of stony banks and old Oak woodland.
- The site is also selected for the following species listed on Annex II of the same directive: Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter and the plant, Killarney Fern.

Draft Management Plans

No specific conservation management plan has been published for Mullaghanish to Musheramore Mountains SPA or the Blackwater River (Cork / Waterford) candidate Special Areas of Conservation (cSAC) to date. A draft management plan for these Natura sites was provided by NPWS on 26th May 2010 for both the Blackwater River cSAC and Mullaghanish to Musheramore Mountains SPA. Draft management plans detail the following legislative requirements and conservation objectives for both sites detailed.

Legislative Context

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as cSAC. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- *Its natural range, and area it covers within that range, is stable or increasing; and*
- *The ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.*

The favourable conservation status of a species is achieved when:

- *Population data on the species concerned indicate that it is maintaining itself;*
- *The natural range of the species is neither being reduced or likely to be reduced for the foreseeable future; and*
- *There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*

Conservation Objectives Mullaghanish to Musheramore Mountains SPA

Main Conservation Objective: To maintain the special conservation interest for this SPA at favourable conservation status: Hen Harrier.

Conservation Objectives Blackwater River cSAC

Objective 1: To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status: Estuaries; Mudflats and sandflats not covered by sand; Atlantic salt meadows (*Glauco-Puccinellietalia maritima*); Mediterranean salt meadows (*Juncetalia maritimi*); Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation; Alluvial forests

with *Alnus glutinosa* and *Fraxinus excelsior* (Alno- Padion, Alnion incanae, Salicion albae); Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles; *Taxus baccata* woods of the British Isles.

Objective 2: To maintain the Annex II species for which the cSAC has been selected at favourable conservation status: *Trichomanes speciosum*; *Margaritifera margaritifera*; *Austropotamobius pallipes*; *Petromyzon marinus*; *Lampetra planeri*; *Lampetra fluviatilis*; *Alosa fallax*; *Salmo salar*; *Lutra lutra*.

Objective 3: To maintain the extent, species richness and biodiversity of the entire site.

Objective 4: To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Consultation

Consultation was undertaken with Barry O'Donoghue from the NPWS in relation to the project on the 16th February 2010. Key points of note regarding described designated sites are summarised below.

- The least preferable sites for locating any substation development are those located in close proximity to watercourses, due to the potential for siltation downstream.
- It was recommended that flora and fauna surveys be undertaken for the study area.
- It was noted that a single hen harrier nest is located outside the study area to the southeast. TOBIN and NPWS agreed to liaise if any hen harriers are encountered within the study area. Initial bird surveys conducted do not point to any part of the study area as being utilised as a nest site by hen harrier and Merlin. Although initial studies highlight that the study area is used by foraging hen harrier. Foraging habitats for hen harrier within the study area include heath/bog, new/second rotation forest and acid grasslands.
- It was advised that any trees felled will need replanting although no replanting should occur within the SPA.

1.1.4. Potential for Impacts

The potential exists for the hen harrier in the Mullaghanish to Musheramore Mountains SPA to forage within the study area. It is thus possible that disturbance and minor loss of forage habitat may arise during construction and operational phases.

There is the potential for impacts to surface waters associated with the proposed development, such as silt runoff. This may impact sensitive aquatic receptors downstream in the Blackwater catchment area and consequently the cSAC.

Assessment of Likely Effects

A full environmental impact assessment is ongoing for this proposed development. This includes an ecological study to inform baseline conditions within the study area focussing on the emerging preferred route of the transmission connection and substation development. A route selection study is also ongoing which will aim to select a route which minimises possible impacts to sensitive ecological receptors associated with designated sites described. Based on consultation and field studies to date including hen harrier studies (Spring / Summer 2010); it is unlikely that the hen harrier will be impacted as they readily forage over areas where pylons and transmission lines are present and the final route will avoid (undesigned) forage habitat as much as possible. Also potential breeding pairs occur at least 4 to 5 kilometres from the study area based on consultation with NPWS and hen harrier studies to date (May

2010). The route selected will also be located as much as possible out of potential hen harrier forage habitat (e.g. scrub, heath bog and rush pasture).

Suitable water pollution control measures for construction and operational phases of the development will be detailed once a full description of the proposed development is available. At the design stage suitable mitigation will be implemented that retains a buffer zone (5 metres minimum) between any works and natural riparian watercourses. This buffer zone will be a minimum of 2 metres beside drainage ditches or other highly modified watercourses.

This will remove potential impacts to sensitive aquatic receptors in *Blackwater River cSAC*.

Significance of Impacts

No significant detectable impacts are likely. Further detailed mitigation will be provided as part of EIA procedure for the selected project option to confirm this statement.

Cumulative Impacts

The environs of the proposed development including the study area include the following wind farm developments (existing, permitted and planning applications):

Three existing Wind Farm Sites:

- Curragh Wind Farm – This consists of 8 turbines and access roads and is partly included in the study area;
- Coomacheo – This consists of 12 turbines and access roads and the boundary is located approximately 200 metres north west of the study area; and
- Gneeves consists of 15 turbines and access roads and is located on the northern boundary of the study area.

One Permitted (Not built yet):

- Caherdowney Wind Farm consists of 4 turbines and access roads and is located within the study area.

One application (in planning) – This is located in the SPA south of the study area.

Except for the existing planning application detailed, none of the above developments are located in designated sites. A review of the EIS for each site did not highlight any significant potential issues for designated sites. Windfarm developments are not the same as the proposal here. However, a loss of small areas of habitat by all developments needs to be considered.

Based on a review of available EIS, hen harriers are infrequent on all existing developments and no nest sites have been highlighted. The nearest confirmed recent nest site is located at least 2 kilometres from the nearest development (existing and proposed), pers. comm. NPWS. Therefore no cumulative impacts are likely to be arising to this species.

Water quality in the Finnow River has not significantly changed in recent years and hence no cumulative impacts are arising. Water quality appears good (Q4) in the Finnow River based on the most up to date EPA³ data available and observations during field surveys in summer 2010.

I.1.5. Conclusion

Mitigation by avoidance based on the precautionary principle will be implemented in the project design phase. In addition, best practice mitigation will be detailed in the EIS informed by ecological studies and consultation with NPWS. The emerging preferred route for the *Phase One Lead Consultants Site and Route Corridor Identification Report* has been informed by the presence of breeding and foraging hen harrier in the wider area. It is considered unlikely based on survey work to date and consultation with NPWS that any detectable impacts will arise to the hen harrier, from any of the options.

Best practice mitigation during construction should avoid possible direct and indirect impacts to the River Finnow River and hence the Blackwater River (Cork/ Waterford) cSAC. Therefore, for Natura 2000 sites detailed; it is considered that there will be no significant negative impacts from the selected OHL or UGC option. Hence there is no requirement for further stages (Stage 2, 3 and 4) of the appropriate assessment process. This report should be forwarded to NPWS for comment as part of any pre-planning consultations.

³ <http://maps.epa.ie/InternetMapView/mapviewer.aspx>