

Borrisbeg Grid Connection

Appendix 5-1 Desktop Study Methodology

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Rare and Protected Fauna

The principal source of information regarding the distribution of flora in Ireland is the Plant Atlas 2020 (Stroh *et al.*, 2023). The data included in this atlas is from the 2000-2020 atlas survey. This atlas shows data for vascular plants in individual hectads (10 km² squares). The hectad relevant to the study area is S17. These hectads was searched for any rare or protected species which may be recorded in the square during the 2000-2020 atlas survey (and previous surveys) carried out by the Botanical Society of Britain and Ireland (BSBI). The search included the vascular plants listed in Annex II and Annex IV of the EU Habitats Directive, Flora Protection Order (FPO) of 2022 (S.I. No. 235/2022) and the Irish Red Data Book (IRDB) (Wyse Jackson *et al.*, 2016). The searches also included BSBI maps, the NBDC database and the NPWS's Flora (Protection) Order 2022 Map Viewer.

The following records were excluded from this assessment:

- Records greater than 25 years old.
- Records of species identified as Extinct in the Wild (EW), Regionally Extinct (RE) or Extinct (EX) in national red lists.
- Any species listed as Not Evaluated (NE), Data Deficient (DD), Least Concern (LC) or Near Threatened (NT) in national red lists.
- Any species listed as being on the Waiting List in national red lists.

NBDC

The NBDC maintains a database collating rare and protected species records. The Proposed Scheme falls within the following 2km grid squares S17M and S17L. The records for these grid squares were consulted to investigate the likelihood of the presence of rare and protected species within the study area. The following records were excluded from this assessment:

- Mobile animal species records greater than 10 years old.
- Records of species identified as Extinct in the Wild (EW), Regionally Extinct (RE) or Extinct (EX) in national red lists.
- Any species listed as Not Evaluated (NE), Data Deficient (DD), Least Concern (LC) or Near Threatened (NT) in national red lists.
- Any species listed as being on the Waiting List in national red lists.

NPWS

The NPWS has published national datasets for protected habitats and species.⁵ Additionally, the NPWS maintains sensitive biodiversity data which is not publicly available. A data request was submitted by RPS to obtain sensitive data in May 2025 for the 2km grid squares S17M and S17L. The following records were excluded from this assessment:

- Mobile animal species records greater than 10 years old.
- Records of species identified as Extinct in the Wild (EW), Regionally Extinct (RE) or Extinct (EX) in national red lists.
- Any species listed as Not Evaluated (NE), Data Deficient (DD), Least Concern (LC) or Near Threatened (NT) in national red lists.

Invasive Alien Plant Species

Nationally, the European Communities (Birds and Natural Habitats) Regulations 2011 [SI.477] contain the provisions to address invasive alien species.

A full list of Third Schedule species (including animals) can be found at the Irish Statute Book website⁷. S.I. No. 477/2011 was amended in 2015 to remove Canadian waterweed (*Elodea canadensis*) and water lettuce (*Pistia stratiotes*) from the list of Third Schedule species⁸.

Records of Third Schedule invasive alien plant species (IAPS) were obtained from the NBDC database for the 2km grid squares S17M and S17L

Protected Mammals

A number of terrestrial mammal species are afforded protection under international and national legislation in Ireland, including otter (*Lutra lutra*), badger (*Meles meles*), pine marten (*Martes martes*), hedgehog, *Erinaceus europaeus*), pygmy shrew (*Sorex minutus*), red squirrel (*Sciurus vulgaris*), Irish stoat (*Mustela erminea hibernica*), Irish hare (*Lepus timidus hibernicus*) and a number of deer species (red deer (*Cervus elaphus*), fallow deer (*Dama dama*), sika deer (*Cervus nippon*)). All of these species have been assigned a conservation status of *Least Concern* (Marnell *et al.*, 2019), with the exception of sika deer which have not been assessed.

Otters are protected under Annex II of the E.U. Habitats Directive as a species for which core areas of their habitat must be protected within the Natura 2000 network, and Annex IV as species protected across their entire natural range. Pine marten are protected under Annex V of the EU Habitats Directive where their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

All species listed above (i.e. otter, badger, pine marten, hedgehog, pygmy shrew, red squirrel, Irish stoat, Irish hare and the three deer species) are all protected under the Wildlife Acts (1976 to 2022).

Reptiles and Amphibians

Common frog (*Rana temporaria*) is protected under Annex V of the EU Habitats Directive and the Wildlife Acts (1976 to 2022), while smooth newt (*Lissotriton vulgaris*) and common lizard (*Zootoca vivipara*) are both protected under the Wildlife Acts (1976 to 2022). Natterjack toad (*Epidalea calamita*) is also protected under Annex IV of the EU Habitats Directive and the Wildlife Acts, however, its distribution in Ireland is restricted to counties Kerry and Wexford and is very unlikely to occur in the Zol of the Proposed Grid Connection.

Terrestrial Invertebrates

A number of terrestrial invertebrates in Ireland are protected under EU and national legislation including Kerry slug (*Geomalacus maculosus*), marsh fritillary butterfly (*Euphydryas aurinia*) and whorl snails (*Vertigo* spp.). Kerry slug is protected under Annex II and IV of the EU Habitats Directive and the Wildlife Acts (1976 to 2022) while three species of whorl snail (*Vertigo geyeri*, *Vertigo angustior*, *Vertigo moulinsiana*) and marsh fritillary butterfly are protected under Annex II of the Habitats Directive. Kerry slug primarily occurs across counties Kerry and Cork; however, they have also been recorded from more localised areas in counties Galway and Tipperary. This species is, therefore, unlikely to occur in the Zol of the Proposed Grid Connection.

Bats

All Irish bat species (common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nathusius' pipistrelle (*Pipistrellus nathusii*), Leisler's bat (*Nyctalus leisleri*), Daubenton's bat (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), whiskered bat (*Myotis mystacinus*), brown long-eared bat (*Plecotus auritus*), lesser horseshoe bat (*Rhinolophus hipposideros*)) are protected under the Wildlife Acts (1976 to 2022) and by the Habitats Directive which protects rare species, including bats, and their habitats. All bat species are listed in Annex IV of the Habitats Directive as species protected across their entire natural range and the lesser horseshoe bat is further listed, under Annex II, as a species for which core areas of their habitat must be protected within the Natura 2000 network.

They can be found roosting in both vegetation and structures (e.g. buildings, bridges etc.) and are known to use habitats such as trees, hedgerows and other linear features as commuting corridors between roosts and foraging habitat.

The Bat Landscapes Suitability Index (Lundy *et al.*, 2011) provides a landscape conservation guide for Irish bat species and includes all bat species that commonly occur in Ireland. It identifies the geographical areas that are suitable for individual species and represents these areas in an index that ranges from 0 to 100 with 0 being the least favourable and 100 being the most favourable for bats.

Ornithology

Bird Atlases

The NBDC online map viewer was consulted for records of breeding and over-wintering birds for the following 2km grid squares: S17M and SI7L. The majority of these records originate from The Bird Atlas 2007-2011: The Breeding and Wintering Birds of Britain and Ireland (British Trust for Ornithology) (Balmer, *et al.*, 2013). The following sources of information were consulted in order to determine the conservation status of these bird species:

- NBDC online mapviewer <http://maps.biodiversityireland.ie/#/Home>
- The EU 'Birds Directive'
- The 'Red List' of BoCCI (Gilbert *et al.*, 2021)

Records greater than 15 years old were excluded from this assessment