

ECOLOGICAL PLANNING CONDITIONS – POWERLINE SITE (WITHOUT PREJUDICE)

1. Avian Flight-Activity / Vantage-Point Survey Programme Condition

No development associated with the overhead-line element of the development, including vegetation clearance, construction access, pole installation or conductor stringing, shall commence until a programme of site-specific avian flight-activity surveys has been completed over a period of 24 consecutive months and an updated Avian Collision, Displacement and Barrier-Effect Assessment has been submitted to and approved in writing by DfI following consultation with NIEA, Loughs Agency and the public in both Northern Ireland and the Republic of Ireland.

Prior to commencement of the survey programme, a detailed survey methodology shall be submitted to and approved in writing by the Department following consultation with NIEA. The methodology shall specify:

- the number and location of vantage points;
- the viewshed from each vantage point;
- target species and species groups;
- seasonal distribution of effort;
- minimum observation effort;
- survey periods extending throughout the annual cycle;
- representative survey effort between dawn and dusk, including dedicated dawn and dusk periods;
- appropriate weather constraints;
- recording of flight paths, crossing locations, direction, behaviour and flight height relative to the proposed conductors; and
- recording of territorial, display, foraging, commuting, roosting, migratory and other relevant flight behaviour.

Particular attention shall be given to raptors, upland waders, swans and geese, grouse and other species of conservation concern recorded or reasonably likely to occur within the zone of influence of the development.

Reason

To establish a robust site-specific evidence base for assessing and mitigating avian collision, displacement and barrier effects arising from the operational overhead line.

2. Updated Breeding-Bird and Breeding-Wader Surveys Condition

No overhead-line development shall commence until updated breeding-bird surveys have been completed within the identified ornithological zones of influence, including the Craginagapple, Slievemore and Mullydoo survey areas and any additional areas identified as suitable habitat through the survey programme.

The updated surveys shall:

- retain the existing 800 m survey zone where appropriate for breeding waders and displacement assessment;
- follow current recognised best-practice methodology for upland breeding waders;
- include sufficient visits across the full breeding season to establish breeding status reliably;
- include dedicated early-morning, dawn, evening and dusk survey effort where necessary to detect species and behaviours inadequately sampled by conventional daytime walkovers;
- include targeted survey for snipe display activity and other crepuscular breeding behaviour;
- record survey start and finish times and total survey duration for every visit;
- record all observations using recognised breeding-evidence criteria;
- distinguish clearly between non-breeding, possible, probable and confirmed breeding;
- provide the evidential basis for categorising birds as migrants or non-breeders where they are recorded in suitable breeding habitat during the breeding season; and
- map territories and areas of repeated use.

Reason

To provide a current and temporally representative assessment of breeding-bird distribution and status and to ensure that breeding behaviour occurring outside conventional daytime survey periods is adequately detected and assessed.

3. Wintering Bird, Roost and Seasonal Movement Surveys Condition

No overhead-line development shall commence until a comprehensive wintering-bird and seasonal-movement survey programme has been completed across the relevant ornithological zone of influence.

The survey programme shall extend across the complete autumn, winter and spring movement periods and shall include targeted dawn and dusk roost watches and movement surveys for relevant species, including:

- hen harrier;
- Whooper Swan;
- geese;
- other swans;
- wintering and passage waders;
- raptors; and
- other species of conservation concern identified during survey.

Survey effort shall be designed to identify:

- roost locations;
- feeding areas;
- regular commuting routes;
- movements between feeding and roosting areas;
- migration corridors;
- flight heights;
- crossing points relative to the proposed OHL; and
- seasonal changes in use of the landscape.

Reason

To establish the importance of the development corridor for wintering, roosting, migratory and commuting birds and to ensure that collision, disturbance, displacement and barrier effects are assessed on the basis of a complete seasonal evidence base.

4. Refined Breeding-Status Assessment Condition

Following completion of the updated breeding-bird surveys, a revised Breeding Bird Status Assessment shall be submitted to and approved in writing by the Department following consultation with NIEA.

The assessment shall review all historical and contemporary bird records and shall:

- apply recognised breeding-evidence categories consistently;

- identify possible, probable and confirmed breeding territories;
- reassess previous observations classified as migrant or non-breeding where those observations occurred in suitable breeding habitat within the breeding season;
- take account of repeat detections, territorial behaviour, display activity and habitat suitability;
- explain the evidential basis for the final breeding classification assigned to each sensitive receptor; and
- identify any consequential changes to receptor valuation, impact magnitude, significance or mitigation.

Reason

To ensure that the breeding status and ecological importance of birds using the development corridor are not underestimated through incomplete temporal survey coverage or inappropriate interpretation of occurrence records.

5. Updated Avian Collision-Risk Assessment Condition

Following completion of the approved vantage-point, breeding-bird and wintering-bird surveys, and before commencement of overhead-line construction, an updated Avian Collision Risk Assessment shall be submitted to and approved in writing by DfI following consultation with NIEA.

The assessment shall:

- identify important and regular flight lines;
- identify sections and spans where birds cross or approach the proposed OHL;
- quantify flight frequency and flight-height distribution insofar as the data permit;
- assess seasonal variation;
- assess dawn, dusk and nocturnal movement where relevant;
- assess territorial, display, foraging, commuting, roosting and migratory flights;
- identify species and locations presenting elevated collision risk;
- consider weather, topography and habitat characteristics affecting collision exposure;
- assess cumulative collision exposure with existing and consented overhead infrastructure where relevant; and

- identify the avoidance and mitigation required for each high-risk section.

Where the assessment identifies effects which cannot be adequately avoided or mitigated within the parameters of the permission, the affected section of overhead line shall not proceed unless and until any further planning permission or consent required has been obtained.

Reason

To ensure that operational collision risk is assessed using site-specific bird-movement data rather than species occurrence and generic susceptibility information alone.

6. Quantified Displacement, Disturbance and Functional Habitat-Loss Assessment Condition

Prior to commencement of overhead-line development, a detailed species-specific assessment of operational disturbance, displacement, habitat fragmentation and functional habitat loss shall be submitted to and approved in writing by the Department following consultation with NIEA.

The assessment shall:

- identify all sensitive bird receptors potentially affected by the operational OHL;
- establish appropriate species-specific disturbance and displacement distances or buffers using current scientific evidence;
- calculate the total area of habitat falling within those buffers;
- distinguish physical habitat loss from functional habitat loss caused by avoidance or reduced use;
- quantify fragmentation of breeding, feeding, display, roosting and commuting habitat;
- identify any barriers to movement between habitat blocks;
- assess impacts on territory size and availability;
- assess whether retained habitat remains functionally connected;
- identify direct, indirect and cumulative habitat losses for each sensitive receptor; and
- reassess impact significance using the resulting functional habitat-loss calculations.

The assessment shall specifically consider, where relevant, curlew, snipe, red grouse, hen harrier, merlin and other sensitive upland receptors recorded through the survey programme.

Reason

To ensure that ecological effects are assessed by reference to the amount of habitat which remains functionally available to sensitive species and not solely by reference to the physical footprint of poles and construction works.

7. Species-Specific Habitat Compensation Scheme Condition

Where the approved displacement and functional habitat-loss assessment identifies unavoidable significant or material loss of breeding, feeding, display, roosting or commuting habitat, no development affecting the relevant receptor shall commence until a Species-Specific Habitat Compensation Scheme has been submitted to and approved in writing by the Department following consultation with NIEA.

The Scheme shall:

- identify the receptor for which compensation is required;
- quantify the area and ecological function of habitat lost or rendered functionally unavailable;
- provide sufficient compensatory habitat to address both area and ecological function;
- demonstrate that replacement habitat is appropriately located in relation to existing territories and landscape connectivity;
- address habitat condition, hydrology and vegetation structure;
- provide additionality rather than relying upon habitat already required to be retained;
- account for the time required for compensatory habitat to become fully functional;
- specify management prescriptions;
- establish measurable ecological objectives;
- provide long-term monitoring; and
- contain trigger thresholds requiring remedial action where agreed objectives are not achieved.

Reason

To compensate for unavoidable functional habitat loss, displacement and fragmentation affecting protected and priority bird species and to ensure that compensatory habitat provides equivalent ecological function rather than area alone.

8. High-Risk Span Avoidance and Avian Collision-Mitigation Scheme Condition

No conductors shall be installed until an Avian Collision Mitigation Scheme informed by the approved flight-activity surveys and collision-risk assessment has been submitted to and approved in writing by the Department following consultation with NIEA.

The Scheme shall identify all high-risk and potentially high-risk spans and demonstrate application of the mitigation hierarchy, including as appropriate:

- avoidance and micro-siting;
- route modification within the approved development envelope;
- undergrounding of particular sections where necessary and practicable;
- conductor arrangement and line configuration;
- installation of bird-flight diverters or other appropriate line-marking devices;
- precise identification of spans requiring marking;
- appropriate diverter spacing and installation;
- inspection and replacement requirements; and
- monitoring of effectiveness.

Reason

To avoid and reduce bird mortality and behavioural effects at sections of the proposed OHL shown by site-specific survey to present elevated collision risk.

9. Operational Avian Monitoring and Adaptive Mitigation Condition

Prior to energisation of the overhead line, an Operational Avian Monitoring and Adaptive Mitigation Plan shall be submitted to and approved in writing by the Department following consultation with NIEA.

Monitoring shall commence immediately following energisation and continue for a minimum of five years, or for such longer period as may be required where adverse effects are identified.

The monitoring programme shall include, where appropriate:

- systematic collision-casualty searches;

- correction for carcass persistence and scavenger removal;
- correction for observer/searcher efficiency;
- repeat flight-activity observations at sensitive locations;
- monitoring of bird-flight diverter effectiveness;
- monitoring of identified breeding territories;
- monitoring of displacement from previously occupied habitat;
- assessment of changes in habitat use;
- annual reporting; and
- defined ecological trigger thresholds.

Where observed collision mortality, displacement or habitat avoidance exceeds predicted levels, additional mitigation shall be implemented in accordance with a scheme approved by the Department.

Reason

To verify the predicted operational effects of the overhead line and ensure that unforeseen or greater-than-predicted impacts are subject to effective remedial mitigation.

10. Breeding-Bird Protection During Construction and Maintenance Condition

No vegetation clearance, pole installation, conductor works, construction access or routine vegetation-management activity shall take place within suitable bird nesting habitat during the principal bird breeding season unless an appropriate survey has been undertaken immediately beforehand by a suitably qualified ornithologist.

Where an active nest or breeding territory is identified:

- an appropriate species-specific exclusion zone shall be established;
- the exclusion distance shall reflect the sensitivity of the species, type and duration of disturbance and current scientific evidence;
- the exclusion area shall remain in place until breeding activity has ceased; and
- works shall not recommence without approval from the ECoW.

Existing commitments relating to snipe, red grouse and identified raptor breeding areas shall represent minimum safeguards and shall not preclude larger buffers where survey evidence demonstrates they are necessary.

Reason

To prevent disturbance, damage or destruction of breeding birds, nests and territories during construction and operational maintenance activities.

11. Priority Habitat Protection, Restoration and Compensation Condition

No development shall commence until a Priority Habitat Protection, Restoration and Compensation Plan has been submitted to and approved in writing by the Department following consultation with NIEA.

The Plan shall identify every location at which priority habitat will be directly or indirectly affected and shall specify:

- minimum working widths;
- access routes and methods;
- ground-protection measures;
- peat and turf handling;
- hydrological protection;
- temporary storage arrangements;
- reinstatement methods;
- restoration objectives;
- compensatory habitat locations;
- habitat-condition targets;
- hydrological targets;
- long-term management;
- monitoring; and
- remedial measures.

Compensation shall be assessed by reference to habitat area, condition, hydrological function, connectivity, ecological function and time required to achieve equivalent habitat value.

Reason

To avoid, minimise and compensate for damage to priority habitats and ensure that restored or compensatory habitats achieve equivalent ecological function and not merely equivalent area.

12. Long-Term Vegetation Management Plan Condition

Prior to energisation of the OHL, a Long-Term Vegetation Management Plan shall be submitted to and approved in writing by the Department following consultation with NIEA.

The Plan shall specify:

- areas subject to periodic management;
- management frequency and methods;
- seasonal restrictions;
- protection of nesting birds;
- protection of bat commuting and foraging corridors;
- protection of badger and other protected mammals;
- retention of hedgerow, woodland and riparian connectivity;
- access restrictions within blanket bog, heath, fen and other sensitive habitats;
- invasive-species controls;
- machinery and ground-protection measures;
- ECoW supervision; and
- monitoring and remedial action.

Except where immediately necessary for electrical safety, vegetation management in suitable nesting habitat shall be undertaken outside the bird breeding season.

Reason

To control the recurrent ecological effects arising from operational vegetation management throughout the lifetime of the overhead line.

13. Updated Badger Survey and Mitigation Condition

No site clearance, excavation, construction access or pole installation shall commence until an updated badger survey covering the appropriate zone of influence has been completed and a Badger Protection and Mitigation Plan submitted to and approved in writing by the Department following consultation with NIEA.

The Plan shall establish:

- current sett location;
- sett classification and activity;
- territorial relationships;

- foraging habitat;
- connectivity between setts;
- directly and indirectly affected setts;
- exclusion and disturbance buffers;
- construction and access controls;
- licensing requirements; and
- mitigation or compensation required.

Reason

To ensure that badgers and their setts are protected using an up-to-date understanding of sett status, territory and habitat connectivity.

14. Smooth Newt Protection and Precautionary Survey Requirement Condition

No development within the ecological zone of influence of any known or potentially suitable smooth-newt breeding pond shall commence until an updated Smooth Newt Survey and Mitigation Strategy has been submitted to and approved in writing by the Department following consultation with NIEA.

Where lawful access required to undertake a complete survey cannot be obtained, the Strategy shall proceed on a precautionary assumption of presence unless the Department, following consultation with NIEA, is satisfied that alternative evidence demonstrates that such an assumption is unnecessary.

The Strategy shall address:

- aquatic habitat;
- terrestrial habitat;
- habitat connectivity;
- seasonal restrictions;
- construction methodology;
- exclusion and protection measures; and
- licensing requirements.

Reason

To protect smooth newt and its aquatic and terrestrial habitat where previous positive evidence exists and subsequent survey has been constrained by access limitations.

15. Common Lizard Survey and Mitigation

Condition

Prior to works affecting suitable reptile habitat, updated common-lizard surveys shall be undertaken during appropriate seasonal, weather and temperature conditions in accordance with recognised current guidance.

A Common Lizard Mitigation Method Statement shall thereafter be submitted to and approved in writing and shall identify:

- areas of confirmed and suitable habitat;
- retained habitat;
- vegetation-management methods;
- refugia;
- construction controls;
- habitat connectivity;
- displacement or translocation measures where necessary; and
- supervision by an appropriately qualified ecologist.

Reason

To ensure that common lizard populations and suitable habitat are identified and protected during construction and operation.

16. Bat Roost and Functional Connectivity Plan Condition

Prior to removal or management of any tree, hedgerow, woodland edge or riparian vegetation capable of supporting bats, an updated Bat Protection and Functional Connectivity Plan shall be submitted to and approved in writing by the Department following consultation with NIEA.

The Plan shall address:

- potential roost features;
- confirmed and subsequently discovered roosts;
- commuting routes;
- foraging habitat;
- hedgerow and woodland-edge connectivity;
- riparian corridors;

- temporary and permanent lighting;
- vegetation removal;
- long-term vegetation management; and
- replacement roost or habitat measures where required.

Reason

To protect bat roosts and maintain the functional commuting and foraging habitat used by bats throughout construction and operation of the development.

17. Ecological Clerk of Works and Stop-Work Protocol Condition

A suitably qualified and experienced Ecological Clerk of Works shall be appointed prior to commencement of development and retained throughout all ecologically sensitive construction, reinstatement and habitat-management works.

The ECoW shall have authority to require temporary cessation of works where:

- an active bird nest or previously unidentified sensitive breeding territory is discovered;
- a badger sett, otter resting place, bat roost or other protected-species feature is encountered;
- unexpected priority habitat is identified;
- approved ecological working methods are not being followed;
- unexpected habitat damage occurs; or
- weather or ground conditions create an unacceptable ecological risk.

Works shall not recommence until appropriate mitigation has been implemented and any necessary regulatory approval or licence has been obtained.

Reason

To ensure effective implementation of ecological mitigation and enable immediate intervention where unforeseen ecological risks arise during development.

18. Integrated Ecological Monitoring and Review Programme Condition

Prior to commencement of development, an Integrated Ecological Monitoring and Review Programme shall be submitted to and approved in writing by DfI following consultation with NIEA, Loughs Agency and the public in both Northern Ireland and the Republic of Ireland.

The Programme shall integrate monitoring requirements for:

- breeding and wintering birds;
- collision mortality;
- displacement and habitat avoidance;
- functional habitat loss;
- priority habitats;
- compensatory habitats;
- bats;
- badger;
- smooth newt;
- common lizard;
- vegetation management; and
- other protected or priority receptors identified through updated survey.

The Programme shall specify:

- measurable ecological objectives;
- baseline conditions;
- monitoring methodology;
- frequency and duration;
- reporting requirements;
- trigger thresholds;
- responsibilities; and
- mandatory remedial actions where agreed objectives are not achieved.

Reason

To ensure that mitigation and compensation remain effective throughout construction and operation and that adverse ecological effects are identified and remedied through an enforceable adaptive-management framework.