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Biodiversity — Code of practice for planning and development

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Bat Conservation Trust (BCT)

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Construction Industry Research and Information Association (CIRIA)

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Cranfield University

Department for Environment, Food and Rural Affairs (DEFRA)

Environment Agency (EA)

Flora Locale

Landscape Institute

Local Government Association

Natural England (NE)

Northern Ireland Environment Agency (NIEA)

Scottish Environment Protection Agency (SEPA)

The Wildlife Trusts (TWT)

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Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 92, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 August 2013. It was prepared by Technical Committee BDY/1, *Biodiversity management*. A list of organizations represented on this committee can be obtained on request to its secretary.

The initial drafting of this British Standard was carried out with support from BIS as part of their ongoing programme of support for standardization.

Information about this document

This British Standard gives recommendations and guidance for those in the planning and development and land use sectors whose work might affect or have implications for the conservation or enhancement of biodiversity. As such it is applicable to professionals working in the fields of ecology, land use planning, land management, architecture, civil engineering, landscape architecture, forestry, arboriculture, surveying, building and construction.

It is not envisaged that all the recommendations of this standard will be applicable to every planning application in each jurisdiction, so a judgement has to be made as to which (sub)clauses of the standard apply in each case.

All websites referred to in this British Standard were last viewed on 29 August 2013.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Competence

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced (see Clause **4**).

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

In particular, attention is drawn to the following legislation and statutory regulations. The following list is not exhaustive.

- The Wildlife and Countryside Act 1981, as amended [1]

- The Wildlife (Northern Ireland) Order 1985, as amended [2]
- The Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 [3]
- The European Habitats Directive 1992 [4]
- The Hedgerow Regulations 1997 [5]
- The Natural Environment and Rural Communities Act 2006 [6]
- The Conservation of Habitats and Species Regulations 2010, as amended [7]
- The Conservation (Natural Habitats, &c) Regulations 1994 [8]
- The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995, as amended [9]
- The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 [10]
- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) 1999 [11]
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 [12]
- The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2012 [13]
- The Environment (Northern Ireland) Order 2002, as amended [14]
- The Wildlife and Natural Environment Act (Northern Ireland) 2011 [15]
- The Town and Country Planning (Applications) Regulations 1988 [16]
- The Town and Country Planning (General Development Procedure) Order 1995 [17]
- The Local Government Act 2000 [18]
- The Planning Act 2008 [19]
- The Planning Act (Northern Ireland) 2011 [20]
- The Planning (Northern Ireland) Order 2011, as amended [21]
- The Planning etc. (Scotland) Act 2006 [22]
- The Building Act 1984 [23]
- The Protection of Badgers Act 1992 [24]
- The Nature Conservation (Scotland) Act 2004 [25]
- The Wildlife and Natural Environment (Scotland) Act 2011 [26]
- The Forestry Act 1967 [27]
- The Environment Act 1995 [28]
- The Salmon and Freshwater Fisheries Act 1975 [29]
- The Eels (England and Wales) Regulations 2009 [30]
- The Fish Passage Regulations (in preparation) [31]

0 Introduction

0.1 General

High-quality ecological information is important for:

a) effective decision-making;

b) compliance with statutory obligations and policy requirements;

c) successful implementation of practical conservation and enhancement measures during development; and

d) achievement of desired outcomes.

This British Standard therefore seeks to:

1) promote transparency and consistency in the quality and appropriateness of ecological information submitted with planning applications and applications for other regulatory approvals;

2) give planning authorities and other regulatory bodies greater confidence in the information when they consider proposals for development or land management that potentially affect biodiversity; and

3) encourage proportionality and a good environmental legacy following development.

The standard is intended to assist those concerned with ecological issues as they arise through the planning process and in matters relating to consented development and activities involved in the management and use of land outside the scope of land use planning, which could have site-specific ecological implications.

While the standard is intended primarily for professionals, it recognizes that biodiversity conservation is also enjoyed and pursued by many thousands of dedicated volunteers and amateur enthusiasts. These individuals ought also to follow the recommendations of this standard.

NOTE A professional is capable of making judgements, applying their skills and reaching informed decisions in situations in which a layperson cannot, because the latter have not received relevant training or necessarily gained appropriate experience.

0.2 Implementation

This British Standard gives recommendations for a rigorous professional, scientific and consistent approach to gathering, analysing, presenting and reviewing ecological information at key stages of the planning application process.

The standard also identifies the ecological data, assessment and design of conservation measures to be fed into planning decisions to produce:

a) appropriate, complete and consistent ecological information, within the framework of appropriate legal, policy and best-practice guidance, upon which local planning decisions can be reliably based;

b) certainty and clarity for developers, local planning authorities and other regulatory bodies over the required biodiversity measures to be delivered as part of a specific planning consent or other approval;

c) sufficient information with which to identify and track cumulative biodiversity outcomes (e.g. net losses and gains arising from all planning decisions);

d) greater confidence for third parties that decisions and proposed actions involving biodiversity conservation are transparent, fair, adequate and legally sound;

e) reduced grounds for planning appeal or legal challenge; and

f) maximum scope for local decision-making within the changing legislative and policy framework.

Section 1 addresses the issues surrounding professional practice that are essential for the successful integration of biodiversity into the planning and development process.

Section 2 gives recommendations for integrating biodiversity into the various stages of the planning and development process.

Annex A discusses how the significance of environmental impacts/effects may be assessed.

Annex B gives an overview of the law relating to biodiversity.

Annex C provides a summary of the key requirements for different professional bodies regarding the protection of the natural environment.

Annex D gives a set of standard or model conditions for biodiversity purposes, with an explanation of how they may be used in a wide range of situations.

Annex E provides a summary of various consents that an applicant might be required to obtain in addition to their planning permission.

Annex F explains how ecologists and their contractors might, in the course of their work, have legal responsibilities under the Construction (Design and Management) Regulations 2007 [32].

Annex G lists the various activities that could impact on biodiversity and which ought to be considered as part of the risk assessment.

Annex H indicates what information from an ecological survey may be submitted to the decision-maker, and what may be included in the survey report.

1 Scope

This British Standard gives recommendations and provides guidance primarily for ensuring that actions and decisions taken at each stage of the planning process are informed by sufficient and appropriate ecological information.

In particular, this British Standard provides recommendations and guidance to all professionals working in the planning and development sectors who might encounter biodiversity as an issue during the planning, design and development process on how to:

a) meet obligations under codes of ethics or conduct when taking decisions or undertaking actions that could affect the natural environment; and

b) adopt a professional, scientific and consistent approach to gathering, analysing, presenting and reviewing ecological information at key stages of the planning application process, or in evaluating the ecological implications of associated activities as part of consultation or other regulatory procedures.

The processes recommended in this British Standard are applicable to the terrestrial, aquatic and marine environments.

Although the recommendations of this British Standard are intended primarily for those in the development control and management process, its principles can also be applied to forward planning, and in relation to other consenting processes, e.g. applications for EPS licence applications or environmental permits (see **9.5**). The principles of the standard may also be applied to the preparation and determination of planning applications where geodiversity is a material consideration.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the reference document (including any amendments) applies.

[N1] RIBA Plan of Work 2013 (available at: http://www.ribaplanofwork.com/).

[N2] CIEEM, *Guidelines for Ecological Impact Assessment in the UK: Terrestrial, Freshwater and Coastal Environments.*[1)]

[N3] CIEEM, *Guidelines for Ecological Impact Assessment in Britain and Ireland: Marine and Coastal*.[1)]

[N4] CIEEM Professional Guidance Series No. 9 *Ecological Report Writing.*[1)]

[N5] CIEEM Technical Guidance Series Guidance for Preliminary Ecological Appraisals.[1)]

[N6] CIEEM Professional Guidance Series No. 10 *Metadata standards.* [1)]

[N7] CIRIA (2011) C 691 *Working with Wildlife: Guidance for the Construction Industry*. London: Construction Industry Research and Information Association. 2011.

[1)] Available from the Chartered Institute of Ecology and Environmental Management via: http://www.cieem.net

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 priority habitats and species
priority species and habitats identified as being the most threatened and in need of conservation action

NOTE In England, Wales and Scotland "habitats and species of principal importance for the conservation of biodiversity" are listed respectively in sections 41 and 42 of the Natural Environment and Rural Communities Act 2006 [6]; in section 2(4) of the Nature Conservation (Scotland) Act 2004 [25]; and in Northern Ireland, Priority Species List 2010: http://www.doeni.gov.uk/niea/northern_ireland_priority_species_list.pdf. The country-based lists are all shown on the Joint Nature Conservation Committee (JNCC) website (http://jncc.defra.gov.uk/). See UK Priority Lists and click on the relevant country at: http://jncc.defra.gov.uk/page-5717

3.2 biodiversity
variability among living organisms, including terrestrial, marine and other aquatic ecosystems and ecological complexes of which they are a part

NOTE This includes diversity within species, between species and of ecosystems.

3.3 code of professional ethics or conduct
set of guidelines which sets out acceptable conduct and behaviour for members of a profession and regulates the ethical norms, values and principles that guide professionals and inform their decisions and professional judgement

NOTE In addition to setting a professional standard, a code of ethics can also increase confidence in an organization by showing outsiders that members of the organization are committed to following basic ethical guidelines in the course of their work.

3.4 competent person
person who has the qualifications, training, skills and experience relevant to the task being undertaken

3.5 consent
approval required to allow works or development to take place where they would otherwise not be permitted in law

NOTE See Annex E.

3.6 culpable ignorance
failure to exercise ordinary care to acquire knowledge of the law or facts of a case or project which could result in unsound professional judgement or action

NOTE Culpable ignorance, in a professional sense, is where ignorance of the facts surrounding a situation does not diminish the person's responsibility for unwarranted or unfortunate outcomes of an action. Even though the person acted in good faith at the time, they were failing in a duty by being ignorant of the nature of their actions or the circumstances in which they acted. In short, they ought to have known better. Consequently, they are still subject to censure for the consequences of their action, even though these were not intended. Therefore, while culpable conduct is not necessarily criminal, it might constitute action contrary to a professional code of conduct and be sanctioned by the relevant professional body.

3.7 decision-maker
body with the responsibility and authority to take decisions on applications

NOTE In England, this includes local planning authorities, the Planning Inspectorate (including their remit for Nationally Significant Infrastructure Projects), the Marine Management Organisation, and the appropriate Secretary of State and/or Minister(s). In Scotland, it includes the Directorate of Planning and Environmental Appeals, and in Northern Ireland the Planning Appeals Commission. It also includes statutory bodies responsible for the grant of other consents necessary to enable the commencement of development, e.g. protected species licences or land drainage consent.

3.8 development
carrying out of building, engineering, mining or other operations in, on, over or under land, or making of any material change in the use of any buildings or other land

NOTE 1 Building operations include:

a) demolition of buildings;

b) rebuilding;

c) structural alterations of or additions to buildings; and

d) other operations normally undertaken by a person carrying on business as a builder.

NOTE 2 With regard to operations likely to affect biodiversity, development activities also include enabling or ancilliary works, i.e. soil stripping, demolition, dewatering, vegetation removal, etc.

[SOURCE: Town and Country Planning Act 1990 [33], modified]

3.9 ecological clerk of works (ECoW)
person who has the ecological qualifications, training, skills and relevant experience to undertake appropriate monitoring and to provide specialist advice to "development" site personnel on necessary working practices required to i) safeguard ecological features on site and ii) aid compliance with any consents and relevant wildlife legislation related to the works

NOTE An ECoW is often required to make decisions quickly, and sometimes in highly pressured circumstances. It is a role that is rarely appropriate for a junior ecologist unless provided with significant support from a senior colleague.

3.10 ecological constraints and opportunities plan (ECOP)
design tool that shows where biodiversity might act as a constraint to development and also where the development site presents opportunities to retain, mitigate, compensate or enhance biodiversity

3.11 ecological impact assessment (EcIA)
process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components, and usually performed as one element of environmental impact assessment

[SOURCE: Treweek 1999 [34]]

3.12 ecological metadata
information necessary to understand and effectively use data, including documentation of the data set content, contexts, quality, structure and accessibility

NOTE A simple metadata set would answer the following questions: What are the data? Why, when, where and how were data collected, and by whom? However, comprehensive metadata ought to cover much more, enabling the end-user to assess the reliability of the information provided and its suitability for a given application.

3.13 ecology
study of the distribution and abundance of species, the interaction between species, the interaction between species and their environment, and the structure and function of ecosystems

3.14 enforcement action
procedure by which a competent authority ensures conditions and obligations associated with a planning or other consent are carried out, or whereby development carried out without planning permission is brought under control

3.15 environmental impact assessment (EIA)
process of determining the likely effects of projects that could have a significant effect on the environment

NOTE "Impact" refers to an action being taken and an "effect" is the change resulting from that action. An EIA is required for compliance with European Directives 85/337/EEC [35], 97/11/EC [36] and 92/43/EEC [4], the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 [10], the Town and Country Planning (Environmental Impact Assessment) (England and Wales) 1999 [11] (in Wales), the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 [12], and the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2012 [13]. Directive 2011/92/EU [37] requires member states to assess the likely significant effects of a project (e.g. development) on the environment before determining whether consent is to be given. This British Standard refers to "significant effects" in a wider sense, to mean positive (beneficial) or negative (adverse) environmental effects that are important (material) considerations in the decision-making process, whether assessed as part of an EIA or otherwise. Annex A provides a full explanation of how significance may be assessed in any particular situation.

3.16 environmental statement
document that provides environmental information to the public and other interested parties about the environmental impact of a proposed development

3.17 favourable conservation status
condition achieved when:

a) population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;

b) the natural range of the species is not being reduced for the foreseeable future; and

c) there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis

3.18 landscape
area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors

[SOURCE: European Landscape Convention [38]]

3.19 layperson
person who is not an expert in a given field of knowledge and has no appropriate qualifications or training, or no or little relevant experience

3.20 method statement
document that details a safe system of work, explaining in detail the work to be undertaken and possibly including illustrations and details of necessary equipment and personnel and their required competence

NOTE The method statement is usually provided for the client by the principal contractor and/or for the principal contractor by the subcontractor(s).

3.21 nationally designated statutory site
area designated at a national level and protected by European and/or national legislation

3.22 non-statutory designated site
area without protection by the law, designated at a local level and protected by local and national policy

3.23 professional
person working in an occupation requiring special education, training and experience who provides professional services and is bound by a code of professional ethics or conduct

NOTE Professionals are normally required by their professional bodies to undertake continuing professional development (CPD) as a condition of membership in recognition of their professional responsibility to ensure that they are equipped with the most up-to-date knowledge and skill to discharge their roles effectively. Examples are planners, architects, surveyors, civil engineers, landscape architects and ecologists.

3.24 professional ecologist
person who has, through relevant education, training or experience, gained recognized qualifications and expertise in the field of ecology and environmental management

3.25 professional judgement
use of accumulated knowledge and experience in order to make an informed decision that is clearly capable of being substantiated with supporting evidence

NOTE Professional judgement takes account of the law, ethical considerations and all other relevant factors related to the surrounding circumstances.

3.26 professional scrutiny
close, careful examination or study, with special emphasis on searching for errors or omissions

3.27 protected species (European)
species identified as species of European Community interest and in need of strict protection, distinguished from other species protected primarily by domestic UK legislation

*NOTE These species are listed in Annex IV of European Habitats Directive [4]. See **3.29**.*

3.28 protected species (non-European protected species)
certain plants and animals listed in and protected by national wildlife legislation

NOTE For relevant legislation see Annex B.

3.29 protected species licence
licence required for activities that would otherwise be prohibited by protected species legislation

NOTE 1 European protected species are listed in Annex IV of the European Habitats Directive [4] and other protected species are listed in the schedules to UK legislation (see Annex B). Offences vary according to species, but include disturbance or damage of breeding sites.

NOTE 2 Planning permission per se does not authorize development to proceed in contravention of any statutory provisions relating to protected species.

3.30 scientific method
impartial mechanism for testing a theory that involves scientists, collectively and over time, constructing an accurate (that is, impartial, unbiased, reliable, consistent and non-arbitrary) representation of the world that is i) repeatable by another scientist/professional and ii) provides results that are measurable and capable of comparison

3.31 statutory consultee
government-appointed body established to give advice and to be consulted for comment on development plans and planning applications affecting matters of public interest

3.32 toolbox talks
brief, topic-focused, semi-formal presentations intended to create an increased awareness among personnel on construction sites of health and safety, environmental and sustainability issues

Section 1: Professional practice and interdisciplinary cooperation

*COMMENTARY ON SECTION **1***

The provisions of Section 1 on professional ethics, conduct, competence and judgement are intended to give confidence that recommendations made over ecology, and consequent decisions/actions taken, are by professionally competent individuals and, as such, are likely to be in accordance with statutory and policy requirements and therefore ultimately likely to result in more favourable outcomes for biodiversity conservation.

4 Professional practice for biodiversity conservation

4.1 General

4.1.1 Professionals involved in both the preparation and determination of planning applications where biodiversity could be a material consideration should ensure that they have adequate access to appropriate ecological expertise in order to:

a) establish whether any particular development proposal is likely to have a significant effect on biodiversity (see Annex A); and

b) identify any measures necessary for compliance with all relevant statutory obligations and national and local planning policy.

NOTE Significance does not relate to the scale of the development, but to the impact of the development on biodiversity.

4.1.2 In doing this, professionals should take a proportionate approach (see **5.5**) to ensure that the provision of information with the application is appropriate to the environmental risk associated with the development and its location.

4.1.3 Biodiversity conservation is usually just one of many issues to be considered as part of a planning application. Consequently, professionals responsible for ecological related matters are likely to be working with various other disciplines. In these situations, professionals should work collaboratively as part of an interdisciplinary team.

NOTE 1 The success of a project is not solely down to technical expertise, but also the ability of different professionals to work together as an interdisciplinary team. Such teams are often drawn together by planning applicants, the decision-makers or by various consultees and other stakeholders for the purpose of both preparing and determining applications.

NOTE 2 The Strategic Forum for Construction [39] states that collaborative team working "means the introduction of working practices, methods and behaviours that create a culture in which individuals and organizations are able to work together efficiently and effectively. That means putting aside the fragmentation, duplication and adversarialism that has characterized the industry and replacing it with cooperation, collaboration and mutual support."

4.1.4 To optimize collaboration and promote an interdisciplinary approach, all project team members should:

a) clarify their own roles and their expectations of each other;

b) recognize each other's professional competences, expertise, limitations and likely contributions relevant to the project;

c) identify overlapping responsibilities and areas of expertise, particularly where this might lead to better environmental outcomes; and

d) negotiate consensual decisions and outcomes.

NOTE Consensus need not be a unanimous decision, but rather an equal opportunity for each member to influence the outcome.

4.2 Professional ethics and conduct

4.2.1 Where an individual is a member of an appropriate professional body they should act in accordance with their own code of professional conduct in all aspects of their work and in their relationships with others. They should also be aware of and uphold any particular requirements of their code of conduct relating to the protection of the environment.

NOTE A summary of key requirements for different professional bodies is provided in Annex C.

4.2.2 A professional's code of conduct should be used not only as a source of ethical guidance, but also as a common sense indicator to the principles of good practice to be applied and the necessity of working within their own discipline and level of competence.

4.2.3 Competent persons who are not members of a relevant professional body should act in a manner consistent with the code of conduct applicable to their own professional discipline.

4.2.4 Biodiversity conservation is not the sole preserve of the professional, but is also enjoyed and pursued by many thousands of dedicated volunteers and amateur experts. When involved with work within the planning system, these individuals should also follow the applicable recommendations of Section 2.

4.3 Professional competence

*COMMENTARY ON **4.3***

Professional expertise is not necessarily restricted to job title, and some individuals might have multiple qualifications and areas of competence. For instance, a landscape architect could also be a qualified ecologist. Such individuals could also be members of more than one professional body.

4.3.1 Where a public body has, in the exercise of its functions, some form of statutory responsibility to consider biodiversity conservation (e.g. under the Habitat Regulations [7, 8 and 9]), it should have access to appropriate levels of ecological competence to enable it to discharge its obligations effectively and lawfully.

4.3.2 Any individual dealing with ecological issues at any stage of the planning application process should be able to demonstrate that they have sufficient technical competence and experience to carry out the particular tasks and activities for which they are responsible in the role that they are performing. They should only attempt to offer a *bona fide* ecological opinion if they have the necessary knowledge, skills and experience to do so, or have secured appropriate competent assistance.

NOTE 1 Under any other circumstances the professional might be acting in conflict with their professional code of conduct.

NOTE 2 This is enshrined in the Code of Conduct for all members of the Chartered Institute of Building (see Annex C).

4.3.3 Where individuals have line management responsibilities, they should ensure that their staff are competent to undertake all work assigned to them and are appropriately supervised and supported where necessary, especially where junior or inexperienced staff are involved.

4.3.4 Evidence of qualifications, additional training and experience should always be available on request as further evidence of an individual's competence in a particular field of knowledge or area of expertise.

4.3.5 Individuals, such as naturalists, working in a "voluntary" capacity for certain non-governmental organizations (NGOs) should, when commenting on planning applications, be able to demonstrate that their comments are within the bounds of their own expertise and experience and any training they have received for this work. Professionals supervising their work should ensure that they are only asked to undertake work that is within their level of competence.

4.4 Professional judgement

NOTE Due to the nature of the planning system professional judgments can be challenged. Knowledgeable, experienced and objective individuals can reach different conclusions in applying professional standards, despite similar facts and circumstances. This does not necessarily mean that one conclusion is right and the other is wrong. Appropriate questioning to understand the procedures performed and the basis for conclusions reached is to be expected.

4.4.1 Development proposals that are likely to affect biodiversity should be informed by expert advice. This should be based on objective professional judgement informed by sound scientific method and evidence, and be clearly justified through documented reasoning.

4.4.2 In order to demonstrate sound professional judgement, the professional should:

a) gather all the relevant information;

b) identify the issue(s);

c) identify practicable options for action that could be taken to address the issue(s);

d) make clear the weight to be attached to the issues and options considered; and

e) choose appropriate options and present these in a succinct and transparent manner, ensuring that the final decision or recommendation is clearly explained and can be justified.

4.4.3 An explanation, with evidence, of the assessment and decision-making process and the reasons for a particular course of action or piece of advice should be clearly documented and made available where required and/or necessary.

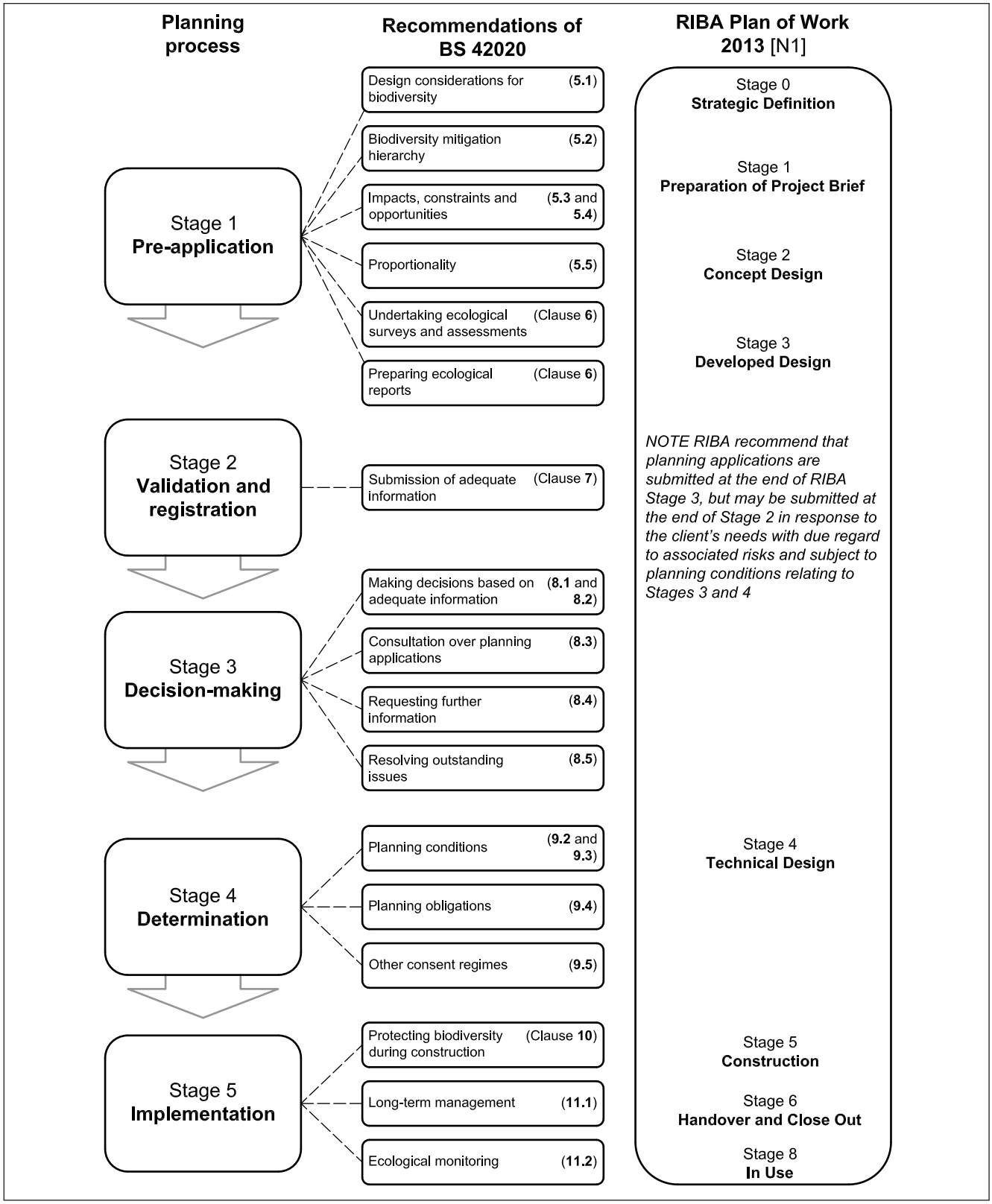
*NOTE It is especially important to provide evidence of how professional judgement has been applied where ecological work does not follow, in full or in part, the recommendations set out in national good practice guidelines (see **6.3.4, 6.3.5** and **6.3.6**).*

4.4.4 Decision-makers should similarly be able to justify any request they make for specific information to be provided, especially where alternative options or methods are available as recommended in good practice guidelines, e.g. for ecological surveys (see **6.1.8**).

Section 2: Integrating biodiversity into all stages of the planning, design and development process

NOTE Section 2 follows the logical sequence of the flow diagram in Figure 1.

Figure 1 **Incorporating biodiversity into the planning and development processes**



5 Design considerations for biodiversity

5.1 General

*COMMENTARY ON **5.1***

Biodiversity can be a material consideration in the formal planning system, whether or not the features benefit from any statutory protection.

Certain biodiversity features are of such importance and sensitivity as to prevent development occurring or to justify substantial modification of its design and layout. If significant harm resulting from a development cannot be avoided, adequately mitigated or, as a last resort, compensated for, then planning permission may be refused.

5.1.1 The initial concept and then detailed design and assessment of a development scheme is part of an iterative process in which each part of the process informs the other. The identification of biodiversity constraints and opportunities and an assessment of likely ecological impacts should be conducted at the start and considered throughout this process.

NOTE For works subject to planning consent, licences to undertake works that could affect protected species can be applied for only after planning permission has been granted. However, it is advantageous to consider at the design stage what, if any, actions will be required to mitigate for impacts on EPS. This is to ensure that the submitted proposals provide sufficient mitigation or compensation to allow any necessary licences to be granted without the need to alter plans at a later stage.

5.1.2 All professionals working in planning and development should collaborate in order to achieve the best practical and sustainable options for integrating biodiversity into the overall scheme design. In particular, because of their complimentary knowledge and skills, collaborative input from ecologists and landscape architects should be sought from the start of a project wherever possible, to:

a) highlight opportunities and constraints;

b) allow effective integration of these aspects into the design proposals to provide multiple benefits and to avoid potential design conflicts at a later stage;

c) meet the requirements of policies that demand an interdisciplinary approach (e.g. landscape, biodiversity and green infrastructure strategies); and

d) identify and advise on the need to obtain any other environmental consents that might also be required in addition to planning permission (see **9.5**), especially where these may be sought in advance of, or in parallel with, the planning application process.

5.1.3 In surveying and assessing biodiversity assets and opportunities, ecologists should have regard to the planning context for the development proposal in question, referring to established planning principles, all relevant national and local plan policies, local biodiversity objectives and targets and green infrastructure strategies, along with any relevant supplementary planning documents.

5.2 Mitigation hierarchy

*COMMENTARY ON **5.2***

The overarching aims of ecological work used to inform the planning process are to minimize harm and to maximize benefits for biodiversity resulting from development. The generally accepted way of doing this, now embedded within the planning system, is to follow the "mitigation hierarchy". This seeks as a preference to avoid impacts then to mitigate unavoidable impacts, and, as a last resort, to compensate for unavoidable residual impacts that remain after avoidance and mitigation measures.

The principles for the mitigation hierarchy have been adopted in national planning policy guidance: Technical Advice Note TAN 5 [40] in Wales and the National Planning Policy Framework (NPPF) [41] in England. See also Mitchell 1997 [42] and the DCLG's Environmental Impact Assessment: A Guide to Good Practice and Procedures [43].

5.2.1 The mitigation hierarchy should underpin all decisions made by professionals working within the planning and development sectors.

5.2.2 During the design stage the overall aim should be to prevent harm to existing biodiversity assets, delivering at least no net loss for biodiversity, and to deliver further benefits for biodiversity, i.e. a net gain, wherever possible. The mitigation hierarchy is a sequential process and each step in the hierarchy should be carefully considered in turn, and incorporated into the design of the development (and checked by the decision-maker) before the next step is considered in light of any residual impacts not rectified by the previous step.

*NOTE 1 The mitigation hierarchy has long been part of the planning process, and is used to examine a wide range of potential impacts. The hierarchy is set out here for use when considering potential biodiversity impacts, but might be equally applicable to the consideration of potential impacts on, for example, landscape or public amenity. Avoidance, mitigation and compensation are associated with adverse effects, while enhancement is associated with beneficial effects (see also Note to **3.15**).*

a) Avoidance

Avoiding adverse effects through good design should be the primary objective of any proposal. This may be achieved, for example, through either the selection of alternative designs, alterations to site layout, or by selecting an alternative site where no harm to biodiversity would occur.

b) Mitigation

Adverse effects that cannot be avoided should be adequately mitigated. Mitigation measures minimize the negative impact of a plan or project, during or after its completion. An example of mitigation is the use of pollution interceptors to minimize pollution of watercourses. Ideally, mitigation measures should form part of the development proposal, but additional mitigation measures can be imposed by the decision-maker. All mitigation measures should be secured through the use of planning conditions or planning obligations.

c) Compensation

The protection of biodiversity assets should be achieved through avoidance and mitigation wherever possible. Compensation, the next step in the hierarchy, should only be used in exceptional circumstances and as a last resort, after all options for avoidance and mitigation have been fully considered. Compensatory measures should therefore only be used to address any residual impact that cannot be avoided or mitigated.

The extent of compensatory measures, whether on the development site, off site or a combination of both, should take full account of the extent and quality of the asset being lost or degraded, and the risks associated with the creation of new habitats or the restoration of existing ones. Wherever possible, compensatory measures should be timed so that biodiversity losses do not occur until compensatory measures are in place and likely to establish successfully.

Ecologists and decision-makers should be aware that there are specific statutory requirements that apply to the consideration of potential impacts on designated sites and the use of compensatory measures, e.g. under the Habitat Regulations [7, 8 and 9]. Advice should be sought from the relevant statutory nature conservation body, where necessary.

NOTE 2 In some instances, indirect effects might not occur within the footprint of the development site but at some distance from it; these might still require compensation.

NOTE 3 One means of delivering compensation is through biodiversity offsetting. Where it is not possible to offset any residual harm at the location where the impact occurs, biodiversity offsets may be undertaken at an alternative location agreed with the decision-maker. Such measures ought to be secured through a planning obligation and ought not to be used in place of any applicable statutory requirements.

d) Enhancement

The mitigation hierarchy involves a step-by-step approach of avoiding, mitigating or, where necessary, providing compensation for any adverse effects of development. Almost all development proposals provide opportunities to enhance or create new benefits for wildlife, which should be explored alongside the application of the hierarchy of measures to resolve potential adverse effects.

NOTE 4 Enhancements are additional to any measures necessary to deal with potential impacts on site, as they are an opportunity to provide new benefits for biodiversity as a consequence of the development being implemented.

Creating new habitat, enhancing existing habitat or providing new features can all contribute towards biodiversity enhancement, and helping to rebuild habitat networks in the wider area improves ecological resilience and adaptation to climate change. Benefits can be maximized if undertaken to support biodiversity work being undertaken by other parties, such as Local Wildlife Trusts or through agri-environment schemes, or if they are consistent with biodiversity strategies or priorities already in place in the local area, such as Nature Improvement Schemes (NIAs) as identified in England.

5.2.3 Avoidance, mitigation, compensatory and enhancement measures should be secured by the decision-maker through planning conditions or planning obligations (see **9.2** and **9.4**).

5.2.4 Where the strategies adopted are for mitigation or compensation of significant effects, the designers should demonstrate that alternatives have been considered and that avoidance of negative impacts is not feasible.

5.2.5 Consideration should be given to how the development proposal could best contribute to delivering local biodiversity priorities, such as those identified through forward planning documents and in local biodiversity action plans and strategies (e.g. in England for Nature Improvement Areas).

5.3 Ecological impact assessment

Ecological impacts should be assessed, and recommendations for appropriate mitigation, compensation and enhancement made, in accordance with CIEEM [N2 and N3].

5.4 Ecological constraints and opportunities plan (ECOP)

*COMMENTARY ON **5.4***

An ecological constraints and opportunities plan (ECOP) is a useful tool/drawing that may be used to present ecological information to other professionals and can assist with gaining the best outcomes for biodiversity. It has three main roles:

- *at the pre-application stage, an ECOP may be used as an iterative tool within the design team to inform the overall design process;*
- *at the decision-making stage, it may be used to provide summary information for the decision-maker showing graphically how the mitigation hierarchy has been applied in practice – as such, it is an opportunity to show what and where the key biodiversity constraints and opportunities are associated with the proposed development described in the planning application; and*
- *at the implementation stage, it may be used to provide an overview, showing how and where biodiversity is to be addressed during the actual development works or aftercare period (e.g. as a summary drawing(s) forming part of a construction environmental management plan).*

An ECOP may be cross-referenced to landscape, historical, cultural features and tree constraints on site (BS 5837). It may also be cross-referenced or integrated with master plans and landscape plans being prepared separately by other design professionals.

5.4.1 An ECOP should be submitted with an application where appropriate and/or where agreed between the decision-maker and the applicant (see **6.1.9** and **6.5**); it may refer to land both within and ouside of the application boundary.

5.4.2 An ECOP should be prepared using the results, as they become available, from ecological surveys, and initial identification of sensitive features and potential impacts, along with an assessment of their condition in relation to their potential for enhancement. The ECOP should be prepared on an appropriate scale plan showing (where relevant) the following.

a) Areas and features on and off site, including appropriate buffer areas that, by virtue of their importance, are to be retained and avoided by both development activities and the overall footprint of development (see Annex G for potentially harmful activities).

b) Areas and features where opportunities exist to undertake mitigation and compensation.

c) Areas and features with potential for biodiversity enhancement.

d) Areas and features that will be affected adversely by the proposed development, e.g. through loss or reduction of habitat and/or severance or disturbance of critical habitat linkages.

e) Areas where ongoing biodiversity conservation management is required to prevent deterioration in condition during construction/implementation.

f) Areas needing protection on site and/or in adjacent areas (e.g. from physical damage on site or pollution downstream) during the construction process.

g) Areas where biosecurity measures are necessary to manage the risk of spreading pathogens or non-native invasive species.

5.4.3 The level of detail in the ECOP should be proportionate to the nature and scale of the proposed development (see **5.5**). The ECOP should be used to inform site design and layout, with biodiversity balanced against the other competing needs from the development, taking into account the international, national or local significance of the habitats and/or species affected.

NOTE An ECOP may be quite simple in format and content (e.g. when illustrating relevant biodiversity features associated with an application for a barn conversion) or may be extensive in its coverage (e.g. when applied to a large-scale development across a wide area with many biodiversity features present).

5.5 Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

NOTE 1 This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England [41].

*NOTE 2 The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary (see **6.4.5**).*

6 Pre-application (Stage 1)

6.1 Information requirements and pre-application discussions

6.1.1 Local planning authorities should assist applicants to identify what information should be submitted with an application. To do this, they may prepare "local lists" (often known as local validation requirements) to identify for the applicant the circumstances when particular information is to be submitted with the application.

6.1.2 The level of information submitted to fulfil validation requirements should be necessary, relevant and proportionate to the development. However, where a planning application does not contain all that the decision-maker has identified in its validation requirements (see Clause **7**), it should be judged as not "valid". As such, the decision-maker is under no obligation to consider and determine it.

NOTE In addition, further written information to guide applicants might also be available from relevant statutory bodies. [2)]

6.1.3 When preparing to make a planning application, the applicant should:

a) determine whether the proposed development is likely to affect biodiversity; and

b) establish what information needs to be submitted with their application to ensure the decision-maker has sufficient information to reach a sound and confident decision.

6.1.4 The information submitted with the application should also allow statutory consultees and other third parties, who look at and comment on applications, to see what permission is being sought, and what the effects (both positive and negative) are likely to be.

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2) For example, Natural England's online Standing Advice on Protected Species: http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/ advice.aspx; in Scotland: http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/ and http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/); in Northern Ireland: http://www.doeni.gov.uk/niea/land-home/plan.htm

6.1.5 To help the applicant identify when biodiversity information is to be submitted with a planning application, reference should be made to any local list of information requirements published by the decision-maker (see **6.1.1, 6.1.2** and Clause **7**).

6.1.6 The pre-application stage should also be used as an opportunity for the applicant, decision-maker and their consultees to identify whether an application involves a type of development and/or is in a sensitive location that will trigger formal assessment under the Environmental Impact Assessment Regulations [10] (see Annex A). If so, the application should be subjected to the necessary screening and scoping processes.

6.1.7 Additional detailed case-specific advice should, wherever possible, be sought through pre-application discussions.

NOTE 1 While not always required or practical, pre-application discussions are widely recognized as beneficial to both prospective applicants and the decision-maker in ensuring a consistent and mutual understanding of the objectives of the development and of the possible constraints and opportunities at the location of the proposed development.

NOTE 2 Pre-application discussions with the decision-maker can be time and cost effective for the applicant. They help to avoid the risk of significant ecology issues or delays arising further on in the planning process that could affect the submission or determination of planning applications. They can also demonstrate the commitment of the developer to implementing biodiversity mitigation, compensation or enhancement measures appropriate to the scheme. Also, engagement with wide-ranging stakeholders and local interest groups in the early stages can generate innovative design options while also helping to avoid costly conflict later on.

6.1.8 Where the decision-maker, and those advising them, request that particular good practice is followed (e.g. for ecological surveys), the reasons for this should be fully justified and should be appropriate and proportionate to the case in question, especially where alternative options are available (see **4.4**, **6.3.5** and **6.3.6**).

NOTE It is the responsibility of the applicant to prepare and revise the design of their mitigation schemes and to rewrite any draft environmental statement. It is not the role of decision-makers and consultees, although they might be able to offer advice on what is required to improve the application.

6.1.9 Pre-application discussions and advice should establish the type and level of supporting information required with the application, and may cover:

a) relevant statutory obligations and policy issues for biodiversity;

b) known biodiversity constraints, e.g. designated sites and/or protected species and priority habitats and species;

c) necessary ecological surveys to be submitted with the planning application;

d) likely impacts and opportunities for mitigation, compensation and enhancement (see **5.2**);

e) appropriate good practice guidelines to be followed, and any variation, departure or partial use of such guidelines where case-specific circumstances warrant it (see **6.3.5** and **6.3.6**);

f) necessary consultations with other statutory bodies;

g) the need for other consents (see Annex E);

h) means of securing planning controls, e.g. planning conditions and obligations, and the level of detailed information that may be secured at a later stage if consent is granted; and

i) any particular drawing, plans, pro forma documents, etc., that could be required or used to assist in presenting the findings (see **5.4** and **6.8**).

6.1.10 Pre-application discussions should aim to ensure that any and all ecological evidence required with the planning application is proportionate to the proposed development (see **5.5**).

6.2 Adequacy of ecological information

6.2.1 All ecological information should be prepared and presented so that it is fit to inform the decision-making process (see **8.1**). As such, all ecological information should be:

a) appropriate for the purpose intended and obtained using appropriate scientific methods of ecological investigation and study (see **6.10**);

b) sufficient, i.e. in terms of:

1) scope of study;

2) habitats likely to be affected;

3) species likely to be affected;

4) ecological processes upon which habitats and species and system function are dependent;

5) coverage of a sufficiently wide area of study commensurate with the requirements of the species or feature of interest, including connected systems (e.g. downstream);

6) undertaken over a sufficient period of time and at an appropriate time of year to reveal sufficient details of populations or habitat characteristics (see **6.4.4**);

7) being sufficiently up to date (e.g. not normally more than two/three years old, or as stipulated in good practice guidance); and

8) identification of risks, e.g. spread of pathogens or invasive non-native species.

NOTE The shelf life of any given survey depends on the type of survey undertaken and whether environmental conditions within the study area were "normal" or unusual at the time undertaken (e.g. extreme weather), or are likely to have changed or remained the same. The greater the recent change, the greater the need for up-to-date information.

6.2.2 The ecological information should be understandable by laypersons (i.e. include a non-technical summary), be substantiated throughout with clear evidence, be true and accurate, and follow good practice guidelines, where appropriate, for both content and format (see **6.3.5** and **6.3.6**).

6.3 Ecological reports

6.3.1 Ecological reports to the client and other members of the design team may go through various provisional drafts during the pre-application design process. However, the final report submitted with the application should provide as much certainty as possible (see **6.6.1**) and be prepared specifically with the aim of enabling the decision-maker to reach a sound and lawful determination of the application (see **6.6** and **8.1**). The emphasis should be on identifying and addressing significant impacts. All non-site or non-case specific information should be placed in an appendix, rather than the main text.

6.3.2 Reporting should concentrate on identifying and addressing significant impacts (see Annex A).

6.3.3 In order to provide the decision-maker with adequate standard information (see **6.2** and **8.1**), ecological reports submitted in support of planning applications should include both of the following.

a) The results and findings of all necessary ecological surveys and other data gathering exercises (see **H.1**).

b) A detailed description (ecological assessment) of how biodiversity could be affected by proposed development and the measures proposed to ensure significant adverse effects are addressed (e.g. avoided mitigated or compensated) and that opportunities for enhancement are maximized (see **H.2**).

6.3.4 For a small-scale development proposal (see Note 1), the decision-maker may provide a "report pro forma" (see **6.8**) upon which ecological information may be submitted with the planning application (see Note 2). In such a case, the decision-maker should make clear when such a form is sufficient and acceptable on its own or when it needs to be supported by a standard report including all relevant elements from Annex H.

NOTE 1 Such small-scale developments include "householder applications", "conversion of agricultural buildings" and "minor developments", with the latter defined (section 2.1, The Town and Country Planning (Development Management Procedure) (England) Order 2010) [44]), as i) residential proposals of 1 to 9 units or of not more than 0.5 hectares, ii) provision of a building(s) with less than 1 000 m^2 of floor space or iii) other development carried out on a site of less than 1 hectare.

*NOTE 2 For example, Dorset planning authorities operate a biodiversity protocol that requires completion of a pro forma (see **6.8**). Normally, for small-scale developments, this information is sufficient for the Council to assess the biodiversity implications of the proposed development.*

6.3.5 Ecological reports should have a logical structure and be prepared in accordance with the CIEEM Professional Guidance Series No. 9 *Ecological Report Writing* [N4]. Reports should be tailored where necessary to the requirements of the intended audience.

6.3.6 Methods used to undertake surveys and to prepare information presented in ecological reports should (except in the circumstances covered by **6.3.7**) follow published good practice guidelines where they exist (see, for example, the normative references in Clause **2**). Claims of compliance with good practice should be substantiated (see **4.4**).

6.3.7 A competent ecologist should, as appropriate, modify their approach from that of published good practice or standing advice issued by a statutory body, where, for example:

a) it is necessary to adapt to the specific requirements of a case or site;

b) an innovative approach might improve upon published good practice and/or provide a more valuable outcome;

c) it might only be appropriate to follow good practice guidance in part as the guidance offers a range of optional methods (e.g. for surveys), of which only one is appropriate to the study in question; or

d) published good practice is out of date and/or where better techniques have been developed and recognized throughout the profession.

6.3.8 To achieve full scientific disclosure (see **6.10**), where the use of guidance is only relevant in part, is not followed, or if only parts of it are followed:

a) this should be fully justified in accordance with Clause **4**; and

b) both the benefits and limitations (see **6.7**) arising from any partial use or departure from good practice should be reported in full.

*NOTE To claim compliance with good practice, and then not to disclose any omission or departures from such good practice, might be interpreted as a misrepresentation of the facts and could be in breach of an individual's code of professional conduct (see Clause **4**).*

6.3.9 Ecological reports should describe the methods of study and analysis actually used, rather than describing only what is published in good practice guidelines.

NOTE Describing published good practice guidelines, rather than the actual methods used for the survey, could be considered as misrepresenting the facts and in breach of an individual's code of professional ethics or conduct.

6.3.10 Reports should demonstrate clearly how all staff involved in associated work (e.g. surveys, analysis of results and formulation of recommendations) are competent to undertake the specific work they have been involved with (see Clause **4**).

6.4 Undertaking ecological surveys

6.4.1 Survey methods should follow good practice guidelines and, where undertaken, preliminary ecological appraisals (PEAs) should be conducted in accordance with the CIEEM Technical Guidance Series Guidance for Preliminary Ecological Appraisals [N5] (see **6.3.4**).

6.4.2 Where available, local record centres (LRCs) or other appropriate data providers should be approached initially for species and habitat information to inform desk studies. The data generated through desk studies should be properly analysed and interpreted, with the results used to inform fieldwork and further assessment of the development proposal. Only the main findings and conclusions from desk studies should be provided with the ecological report, with the full results of the desk studies available on request.

NOTE It is not necessary to provide long, uninterpreted species lists from LRCs or other data providers in the information submitted in the report.

6.4.3 Ecological surveys should be carefully programmed into the early phases of the pre-application process. They should also, ideally, be carried out sufficiently in advance of detailed design work to enable the results to be taken fully into account in the design process as this facilitates the logical sequence of events in Figure 1.

NOTE It is recognized that, on occasion, ecological advice is not sought until after pre-application work is well advanced, or even after the planning application has been submitted formally to the decision-maker. Although this is not the ideal situation, timely and appropriate expert advice can still make a valuable contribution to the process of biodiversity conservation and enhancement. However, the cost of incorporating biodiversity into the development could be higher if surveys are not conducted until after designs are well advanced, especially if there are significant effects that need to be addressed.

6.4.4 Surveys should be undertaken at the appropriate time(s) of year to allow for the seasonal characteristics of some habitats and the seasonal behaviour of some species.

NOTE 1 Surveys outside of the optimal time of year could yield inconclusive or even invalid results, and this might ultimately result in increased costs and a delay with either the submission or determination of a planning application.

NOTE 2 A calendar showing appropriate times of year to undertake ecological surveys can be viewed at: www.biodiversityplanningtoolkit.com/stylesheet.asp?file=30062011222444

*NOTE 3 Survey calendars ought only to be used as a guide because seasonal windows might vary depending on geographical location within the UK (for example, winter hibernation tends to end earlier in southern regions than those further north). There is also variation from one year to the next as a result of different weather patterns prevailing through the seasons (see **6.4.5**).*

6.4.5 Where a PEA (see **6.4.1**) has been undertaken, the results might be sufficient to confirm that more detailed ecological surveys are not required. However, where a PEA contains recommendations that further detailed survey work is necessary in order to inform a planning application, this work should be undertaken before determination of the planning application. Ideally, though, all necessary detailed survey information should be part of the application when it is first registered with the decision-maker (see Clause **7**), and planning conditions should only be used to secure ecological surveys in exceptional circumstances (see **9.2.4**).

6.4.6 Appropriate metadata associated with ecological surveys is often an integral part of a report (see **H.1**), but more comprehensive metadata should be available on request where this will further facilitate the understanding and use of data. Management and provision of metadata should follow the CIEEM's Professional Guidance Series No.10 *Metadata Standards* [N6].

6.4.7 Survey data should be made available to local biological records centres at the time that an ecological report enters the public realm, unless there is an explicit contractual restriction on such data release, e.g. as set out in the terms and conditions between a client and their ecological contractor. To aid this transfer of data, records from ecological reports should be collated in a format that can be passed easily on to LRCs, county recorders, and/or national recording schemes for mobilization via the National Biodiversity Network.

NOTE Natural England's class licences for protected species surveys require licencees to submit records collected under the terms of those licences to LRCs.

6.4.8 Where relevant, any report on survey activities should also include reference to any evidence of material events occurring on site, either before or after ecological surveys have been carried out, for example:

a) removal or management of vegetation, including trees;

b) alteration or loss of other biodiversity features, such as hedgerows, ponds, ditches or buildings and features of value to protected species;

c) control of weeds or other species; and

d) cessation or reintroduction of grazing or mowing.

Such events should be described and the cause explained where known along with the implications, if any, for the main findings of the ecological report.

NOTE 1 Such activities may include unexplained "clean up'" in derelict or old agricultural buildings or structural changes to an old building, e.g. installation of a new roof.

NOTE 2 Aerial photographs may be used to determine what a site was like before changes occurred.

6.5 Non-technical summaries and record of net loss and gain

6.5.1 The ecological report should contain a brief non-technical summary, providing a succinct overview for the decision-maker of the main findings and recommendations. This should be written by a competent ecologist, providing simple points that can be understood and acted upon by a layperson. It should explain exactly how biodiversity occurs on site, how it is likely to be affected, and what measures are to be implemented to avoid or mitigate the effects of development on biodiversity and/or to provide enhancements. It should also make explicit any limitations with current work and the need for any further studies that the decision-maker should be aware of prior to determination.

6.5.2 Where agreed (see **5.4.1**), an ECOP should form an integral part of the non-technical summary, providing a graphic illustration of how the mitigation hierarchy has been applied.

6.5.3 All points within the summary should be substantiated in full by way of detailed ecological evidence provided elsewhere in the main report (see **6.3**).

6.5.4 The non-technical summary should be accompanied by a clear statement of the losses and gains predicted once the development is implemented (see Note 2). This information should be sufficient to enable the decision-makers to monitor the net effects of development on biodiversity (see **11.2**).

NOTE 1 In the past, there was no nationwide or standardized system of recording net losses and gains and ecological reports often do not make explicit what changes are going to occur. However, it is not unreasonable for a decision-maker to expect the applicant to provide a clear and transparent summary of the likely change in biodiversity if consent is granted.

NOTE 2 A template suitable for recording a summary of "net losses and gains" is available on the Biodiversity Planning Toolkit web site at:

http://www.biodiversityplanningtoolkit.com/stylesheet.asp?file=281_summary_of_net_loss_and_gain_form

6.6 Providing certainty and clarity for the decision-maker and the applicant

*COMMENTARY ON **6.6***

Increasing the levels of certainty within an application helps reduce the need to apply the precautionary principle and reduces the need for local planning authorities to seek further information, which can cause delay.

6.6.1 The ecological report should provide sufficient detail and clarity to enable both the applicant and the decision-maker to establish whether the report's proposals and/or recommendations:

a) provide a practicable, deliverable and acceptable means of incorporating biodiversity into the proposed development (see **8.1**); and

b) are proportionate (**5.5**) and justified (**4.4**).

6.6.2 An ecological report should avoid language that suggests that recommended actions "may" or "might" or "could" be carried out by the applicant/developer (e.g. when describing proposed mitigation, compensation or enhancement measures). Instead, the report should be written such that it is clear and unambiguous as to whether a recommended course of action is necessary and is to be followed or implemented by the applicant. If there is any uncertainty associated with the delivery of a recommendation in the report, the degree of uncertainty should be made explicit and, if possible, quantified using appropriate statistics.

NOTE Uncertainty can, however, be legitimately expressed using tentative terms (e.g. "may", "might", "could") when describing the likelihood of impacts or the likely effectiveness of proposed conservation measures where outcomes might be difficult to predict with absolute certainty.

6.6.3 Where full design details are not yet available and/or where uncertainty remains (e.g. for outline planning consent), the report (see **6.3** and Annex H) should identify and justify when further work has to be carried out. In such circumstances, the report should identify for the decision-maker where further detailed information on proposed avoidance, mitigation, compensation or enhancement measures are to be secured through planning conditions or obligations (see **9.2** and **9.4**), and provided once planning permission has been granted.

6.6.4 Early drafts of ecological reports should feed into the design process and should be sufficiently detailed and specific to enable the applicant and/or developer to establish:

a) when, where and how specified measures should take place; and

b) the likely cost and realistic implications of incorporating such measures into the development as recommended in the report.

6.7 Identifying limitations

6.7.1 To reduce uncertainty, and to achieve full scientific disclosure, those undertaking surveys and preparing ecological advice and reports should identify all relevant limitations relating to:

a) the methods used, including:

   1) personal competence, i.e. qualifications, training, skills, understanding, experience;

   2) inadequate resources (equipment and/or personnel);

   3) inadequate time spent surveying;

   4) inadequate data (e.g. arising from incomplete or inappropriate surveys) giving rise to lack of statistical robustness and higher uncertainties;

   5) use of old and out of date data;

   6) timing or seasonal constraints and suboptimal survey periods; and

   7) partial use of and/or departures from good practice guidelines; and

b) site conditions and other factors, including:

   1) adverse weather conditions;

   2) restricted access to a site or part of a site;

   3) unrealistic deadlines; and

   4) unproven or untested measures for mitigation and compensation.

6.7.2 Any limitations associated with work should be stated, with an explanation of their significance and any attempt made to overcome them. The consequences of any such limitations on the soundness of the main findings and recommendations in the report should be made clear.

*NOTE Failure to report limitations might be considered as misrepresenting the facts, and/or making erroneous, exaggerated or unwarranted statements and therefore in breach of an individual's code of conduct (see Clause **4**).*

6.8 Summary European protected species (EPS) form for local planning authorities

6.8.1 In situations involving European protected species (EPS), it is sometimes possible to avoid harm to the species, and thereby an offence and the need for an EPS licence, by carefully controlling how the works are undertaken. This can be achieved via agreed method statements or by imposing restrictions on how, when or where the works are carried out. In such circumstance, instead of an EPS licence, the specified works should be controlled by the local planning authority through the imposition of appropriate planning conditions.

6.8.2 Where required by the local planning authority (see **6.3.4**), the ecological report should include a summary form indicating whether EPS issues are best dealt with by a method statement(s) secured through a planning condition(s) or through a derogation licence issued by the relevant statutory nature conservation organization (see **9.2**, **9.5** and **D.6**).

NOTE A pro-forma for a summary EPS form for submission to the local planning authority is available on the Biodiversity Planning Toolkit website:

http://www.biodiversityplanningtoolkit.com/stylesheet.asp?file=282_summary_eps_pro_forma

6.9 Declaration of compliance with professional code of ethics or conduct

6.9.1 A "signed disclosure" should accompany all written reports as an explicit affirmation of an individual's competence, and their compliance with their professional code of ethics or conduct (see Clause **4**) and (where it is claimed in the report) compliance with this British Standard. Because this is part of the quality assurance process, both the author and the senior or principal member of staff with overall responsibility for the project or case should sign the disclosure. A "sole trader" should sign the declaration themselves.

6.9.2 It might not be practical for professionals working for decision-makers and their consultees (see Clause **8**) to provide a "signed disclosure" with every report and response they provide. However, for any specific case, they should be prepared to do so upon receipt of a reasonable request.

6.9.3 For written reports, the disclosure should take the following form.

"The [… information/ data/ evidence/ advice/ opinion] which I/we have prepared and provided is true, and has been prepared and provided in accordance with the [… insert name of professional institute …]'s Code of Professional Conduct. I/We confirm that the opinions expressed are my/our true and professional bona fide opinions."

6.9.4 For evidence at public inquires, the disclosure should take the following form.

"The [information/ data/ evidence/ advice/ opinion] which I/we have prepared and provided for this appeal in this proof of evidence is true, and has been prepared and provided in accordance with the [… insert name of professional institute …]'s Code of Professional Conduct. I/We confirm that the opinions expressed are my/our true and professional bona fide opinions."

6.10 Full disclosure of scientific method

6.10.1 The evidence underpinning all ecological advice and reports should be robust and obtained using reproducible scientific methods that allow the reliability of data to be verified.

*NOTE 1 Such practice is called "full disclosure". Scientific experiment or study needs to be capable of being accurately reproduced or replicated by someone else working independently. This enables careful scrutiny (see **8.2**) by other ecologists and professionals, giving them the opportunity to verify results and to analyse and interpret them independently. This is one of the main principles of scientific method.*

*NOTE 2 There are many reasons, and increasing demands, for full disclosure of the underlying data used to support ecological opinions. This is even more important when there is uncertainty or scepticism by the public, third parties or other professionals over the claims sometimes made in ecological reports. Full disclosure helps reduce uncertainty and scepticism (see **6.6** and **8.2**).*

6.10.2 Ecological judgement and advice should be based on sound scientific principles and be as objective as possible to avoid biased, unwarranted or exaggerated interpretation of the results presented. To achieve this, ecological studies should be based on the:

a) identification of a set of relevant scientific (ecological) questions and the design/selection of appropriate methods to answer these;

b) appropriate implementation of the selected methods;

c) objective analysis of data gathered, ensuring that all information is fit for purpose; and

d) impartial interpretation and presentation of results that enable valid conclusions to be drawn and justifiable recommendations to be made.

NOTE 1 These elements of scientific method are also incorporated into the CIEEM Professional Competency Framework [45].

NOTE 2 It is not necessary for data associated with documents that are not passed into the public record, and which remain confidential and the copyright of the client, to be made available, unless there is express authority to do so in relevant contractual terms and conditions between the client and the ecological contractor.

6.11 Provision of original field results and raw data

6.11.1 Where information in ecological advice or reports is part of a planning application, the original field and desk-top data, along with comprehensive evidence of subsequent analysis and interpretation of results, should be available for scrutiny and verification (see **8.2**) by those using and/or reviewing the final conclusions and recommendations.

This does not necessitate submission of all of this information with the main report, but it should on request be made available in full through the inclusion of technical addenda.

NOTE These data can be held as hard copy or in electronic format on compact disc and/or by placing the information in an appropriate easily-accessed online archive.

6.11.2 Accurately transcribed or recorded copies of original field data and/or results from biolab identification should be made available on request in the form in which they were collected, and should not be reworked or re-presented to make them appear more credible or acceptable than they were in their original state.

NOTE 1 Recordings may be collected using various media and equipment, such as via dictaphones, cameras, bat detectors and other remote sensing equipment.

NOTE 2 Failure to maintain the original integrity of the data might lead to further doubt over their value and authenticity. This might consequently be considered as misrepresenting the facts and therefore in breach of an individual's code of conduct.

6.11.3 In some situations, data might be identified as being sensitive (for example, geographical information with grid references for rare or threatened species, such as freshwater pearl mussels, badgers or golden eagles). This information should be clearly identified within the planning application and, where appropriate, be withheld by the decision-maker from release into the public realm.

6.12 Subcontractors' reports and third party evidence

6.12.1 Information and data provided by a subcontractor or a third party (including volunteers and amateur naturalists) should not be used by the main contractor without taking reasonable steps to establish their provenance and validity, if it is appropriate to do so.

6.12.2 All original subcontractor's reports should be referenced accurately by the main contractor in the main document and be made available upon reasonable request for purposes of verification.

6.12.3 Professionals are required to report correctly, truthfully and clearly, and not to misrepresent, falsify or fabricate information, so they should not alter or edit a subcontractor's report without the express approval of their original author. Anyone using such an ecological report(s) should ensure that the final document retains the main findings and conclusions of the original ecological report(s) without substantial alteration of either its content or meaning. Any significant changes should be justified and made explicitly clear and unambiguous.

6.12.4 Where significant differences exist between original and final documents, signed confirmation from the original author (subcontractor) should be included with the report as evidence that any changes made do not substantially alter the content and meaning of the original report or omit any key facts or conclusions.

6.13 Composite reports

NOTE Very often documents and reports submitted with a planning application are a composite of many individual surveys and sub-reports. This is especially the case in the preparation of environmental statements submitted as part of a formal environmental impact assessment.

6.13.1 Composite reports should be prepared:

a) to draw together the overall findings of separate types of surveys; and

b) where several different consultants have worked on the same site and/or case.

6.13.2 Composite reports should provide all of the necessary evidence required to substantiate the results, conclusions, recommendations and proposals that they contain. If a composite report refers to other studies, surveys or research this information should be properly referenced and, where appropriate, be clearly presented in appendices or made available at the request of the competent authority or their advisors and/or consultees.

7 Validation and registration of a planning application (Stage 2)

7.1 If not already done at the pre-application stage (as recommended in **6.1**), the decision-maker should use the validation and registration process as an opportunity to identify all applications that could affect biodiversity and to ensure that adequate information (see **6.2**) is provided to inform the determination of the application.

7.2 In local planning authorities, registration staff and planning case officers should be familiar with and make use of any specific criteria and local requirements that the authority has published on its website (see **6.1**). These criteria should identify situations where biodiversity is likely to be affected by development and, where relevant, information should be submitted with the application. These should generally include applications likely to affect:

a) internationally and nationally designated statutory sites;

b) European and nationally protected species;

c) non-statutory designated sites;

d) priority habitats and species; and

e) significant populations of national or local Red List [46] or notable species.

7.3 Where an applicant has been advised during pre-application discussions, or have themselves identified that they need to provide information on biodiversity with their planning application (see **6.1**), they should ensure that what is submitted is sufficient to enable the decision-maker to validate and register the application.

NOTE Failure to provide all the information required might mean an application is not "valid" and is not considered or determined.

7.4 Where such information is not submitted, or is insufficient, the decision-maker should first consider any argument put forward formally by the applicant that such information is not required in their particular case. If the applicant's argument is accepted, no further information should be required. If, however, further information is required, the decision-maker should delay validation and registration for a specified period to allow time for the identified information to be provided, and then, if this is not provided or is still not sufficient:

a) suggest the applicant withdraws the application;

b) judge that the application is not valid and decline to register it; or

c) register the application and then refuse it on the grounds that there is insufficient information to make a lawful determination.

8 Decision-making (Stage 3)

8.1 Making decisions based on adequate information

The decision-maker should undertake a thorough analysis of the applicant's ecological report as part of its wider determination of the application. In reaching a decision, the decision-maker should take the following into account.

a) The soundness and technical content of ecological information, to ensure:

   1) the proposals are based on adequate (see **6.2**) and up-to-date ecological field data that substantiate clearly the conclusions reached and recommendations made;

   2) ecological methods are, where available, in accordance with good practice guidance (see **6.3.6**); and

   3) departures from any good practice are made clear, are valid and can be justified (see **4.4**, **6.3.6** and **6.3.7**).

b) Whether biodiversity is likely to be affected and whether all potential impacts are described adequately, for example, in relation to:

   1) location and extent;

   2) timing and frequency;

   3) duration/lifespan;

   4) scale or magnitude;

   5) reversibility/recoverability/resilience;

   6) in-combination/cumulative effects; and

   7) likelihood/degree of certainty associated with predicted effects.

c) Whether effects are significant and, if so, capable of being mitigated.

d) Whether the mitigation hierarchy has been applied (see **5.2**).

e) Whether it has been adequately demonstrated that the proposals will deliver the stated outcomes if consent is granted, with particular regard to:

   1) likely effectiveness, e.g. proposed ecological measures are appropriate to the case and technically feasible and, if implemented, likely to achieve desired outcomes; and

   2) certainty over deliverability, e.g. there is evidence of commitment and adequate legal mechanisms to secure sufficient land and resources to implement necessary measures.

f) Whether the measures are capable of being secured through appropriate planning conditions and/or obligations (see **9.2, 9.4** and Annex D) and/or likely to be permitted through another consent regime, e.g. licences for European protected species (see **9.5**, Annex D and Annex E).

g) Whether the proposals are compliant with statutory obligations and policy considerations (see Annex B).

h) Whether there is a clear indication of likely significant losses and gains for biodiversity.

i) Whether any material considerations have been identified that might require changes to the application.

8.2 Professional scrutiny

8.2.1 Without adequate scrutiny of all relevant information a planning consent might be granted for a development that inadvertently leads to significant harm or damage to biodiversity features and resources. This could be in breach of statutory obligations and could lead to legal challenge on the grounds that the consent was not determined lawfully. The accuracy and reliability of ecological information submitted with an application should therefore be scrutinized in accordance with Clause **4** by both the decision-maker and their advisors and consultees.

8.2.2 When applying professional scrutiny the decision-maker or consultee should:

a) objectively assess evidence and information (see **4.4**);

b) establish, where necessary, that the methods used, data collected and proposals and recommendations made are appropriate;

c) establish that evidence is adequate, accurate and unbiased, and that findings and conclusions are substantiated clearly and are not false, misleading, exaggerated or contradictory; and

d) establish that the people providing and reviewing the ecological information hold competence in relevant key areas, and be prepared to request evidence to confirm the competency of the person(s) involved.

8.3 Consulting on biodiversity issues

8.3.1 Consultees (statutory and non-governmental bodies)

A consultee's response should be prepared in accordance with Clause **4**, and clearly indicate, as appropriate:

a) elements of the proposed development they consider to be compliant with legislation, policy and good practice;

b) whether further information is required;

c) issues outside the consultee's remit that, they advise, ought to be considered;

d) suggestions to improve the scheme; and

e) whether they have an objection and the legal and policy basis for this.

Since the decision-maker is likely to place a great deal of weight on any response received from of a statutory consultee, the latter should ensure that all of their advice is subject to the highest levels of professional scrutiny (see **4.3**, **4.4** and **8.5**).

*NOTE The "highest levels of professional scrutiny" require i) scrutiny to be undertaken by a competent person (see **3.4**); ii) allocation of adequate time to enable a thorough consideration of the material submitted (including a site visit, where this would assist); and iii) a sufficiently detailed response (see **5.5**) to provide transparency over how the advice or comments have been reached and to show that due regard has been given to all the relevant considerations.*

8.3.2 Decision-makers

8.3.2.1 Decision-makers should, in addition to consulting relevant statutory bodies where they have a statutory obligation to do so, also consult the most appropriate individual or body for the particular issue in question. This should involve:

a) consulting the relevant statutory nature conservation organization over planning applications that could affect:
   1) internationally and nationally designated sites;
   2) applications requiring scrutiny under the Environmental Impact Assessment Regulations [10]; and
   3) European and nationally protected species;

b) consulting the council's ecologist (or other source of independent advice) and/or the most relevant NGO (e.g. Local Wildlife Trust) or Local Nature or Wildlife Sites Partnership over applications affecting:
   1) non-statutory Local Wildlife Sites (England and Wales) and Local Nature Conservation Sites (Scotland);
   2) protected species, especially where either:
      i) harm can be avoided; and/or
      ii) the relevant statutory body has provided only a standard response and/or only recommended that the decision-maker refer to the consultee's standing advice or other written guidance to identify issues that need to be considered; and
   3) priority habitats and species identified in local and national biodiversity action plans.

NOTE Consultation is particularly valuable where a decision-maker has no in-house ecological expertise.

8.3.2.2 Decision-makers should provide sufficient information about an application to consultees to enable them to make a substantive response.

8.3.2.3 Decision-makers should expect the advice they receive from a consultee to be based on the highest levels of professional scrutiny of the planning application and supporting documents. Where queries are raised regarding the advice received by the decision-maker or interested parties, the decision-maker should seek further clarification, where appropriate, from the consultee within a reasonable timescale. If there are residual concerns relating to the competence of the consultee, the advice received or the time being taken to receive this information, the decision-maker should request escalation of the case within the consultee's organization to ensure that a fully-informed decision can be made.

8.3.2.4 The approval or lack of objection from a statutory consultee should not be regarded as a validation of the ecological information contained in a planning application, unless it is clear that the statutory consultee has:

a) clearly and independently established by the highest levels of professional scrutiny the accuracy and reliability of the information submitted;

b) addressed and attached appropriate weight to any credible and substantiated concerns or alternative points of view raised by the decision-maker and/or third parties; and

c) consequently reached a sound professional judgement (see **4.3** and **4.4**).

8.3.2.5 Where a statutory consultee directs the decision-maker to obtain information from another source or to utilize their standing advice, such a

response should be taken as a direction to further information only, and not an indication of support or otherwise for the proposal. The decision-maker should fully explore the information sources recommended, and should contact the consultee again if further assistance is required.

8.3.2.6 Decision-makers should have due regard to the remit of consultees, both statutory and non-statutory. If an issue falls outside the consultee's remit, and specific comments are not therefore made, this should not be taken as an endorsement of the proposal. Rather, the most appropriate body for that particular issue should be consulted to gain their expert advice to inform the planning decision (see **8.3.2.1**).

8.4 Requests for further information

Following registration and initial consideration of an application and/or receipt of consultation responses, where the decision-maker subsequently identifies that insufficient or inadequate ecological information has been submitted (see **6.2** and **8.1**), they should request that further information is provided to enable them to determine the application. The decision-maker has a number of statutory planning powers available and should, where appropriate, make use of these to require such information to be provided prior to determination.

8.5 Resolving outstanding issues and agreeing and securing outcomes

8.5.1 Where the decision-maker (or consultee) identifies any outstanding issues, these should be discussed with the applicant as soon as possible after registration to enable any additional information and/or evidence to be obtained and any necessary changes to be made to the application (see **4.4, 6.1.6** and **8.4**). Similarly, the decision-maker should seek to clarify and resolve, at the earliest opportunity, any questions or concerns they have over comments or advice received from any consultee (see **8.3.1**).

*NOTE Outstanding issues can include any gaps or uncertainty over the ecological information submitted with the application (see **6.6**), or the need to undertake further assessment of effects or to provide additional mitigation, compensation and/or enhancement measures.*

8.5.2 Once satisfied with the information submitted, the decision-maker should identify and agree with the applicant:

a) likely net losses and gains for biodiversity (see **6.5** and **11.2.3.1**); and

b) where it is going to be necessary to impose planning conditions or obligations to secure essential avoidance, mitigation, compensation and/or enhancement measures as part of the planning consent (see **9.2**, **9.3**, **9.4** and Annex D).

8.5.3 The decision-maker should also advise the applicant over the need to apply for other relevant consents, e.g. an EPS licence (see **9.5.2**).

8.5.4 In situations involving European protected species, it is sometimes possible to avoid harm, and thereby an offence and the need for an EPS licence, by carefully controlling how the works are carried out. This can normally be achieved via method statements, etc., to guide the works or by imposing restrictions on how the works can proceed. In such circumstance, while an EPS licence might not be required, the specified works should be controlled instead by appropriate planning conditions (see **9.2.1**, **9.2.2**, **9.2.3**, **9.4** and Annex D).

9 Determination and issue of planning permission (Stage 4)

9.1 Satisfying statutory obligations for decision-makers

9.1.1 To fulfil relevant statutory and policy obligations, the decision-maker should have regard to biodiversity conservation in the exercise of its planning function. Where an application fails to satisfy these obligations, this may be treated as a valid reason for refusal.

9.1.2 The decision-maker should ensure that, where biodiversity could be affected, proper adherence to the mitigation hierarchy is ensured, with a clear explanation of how this has been applied in any decision made. All planning committee reports and decisions made under delegated powers should record the decision-making process as it relates to biodiversity issues, particularly recording formally how any statutory requirements have been addressed.

9.1.3 Decision-makers should consider whether unacceptable impacts on biodiversity can be made acceptable through use of appropriate planning conditions and/or planning obligations. These should be used to secure enhancements and/or to prevent significant harm to biodiversity that might otherwise arise as a result of the grant of planning permission. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.

9.1.4 Planning conditions should only be imposed where they are:

a) necessary;

b) relevant to planning;

c) relevant to the development permitted;

d) enforceable;

e) precise; and

f) reasonable.

9.1.5 Decision-makers should only use conditions to secure biodiversity measures that are capable of being delivered [see **8.1**e)] and, in doing so, should not apply a "one condition fits all" approach. Instead, specific conditions should be selected that are appropriate to achieve a specific purpose. Where the applicant also has to apply for an EPS licence, once planning consent has been granted, any planning conditions should not be so restrictive that they prevent subsequent modifications to any mitigation or timetables that are required at the licensing stage.

9.1.6 A set of standard or model conditions for biodiversity purposes, with an explanation of how they may be used in a wide range of situations, is provided in Annex D. However, this set is not comprehensive and decision-makers should ensure that any conditions used are, where necessary, adapted appropriately to suit the particular circumstances of a case. All conditions should satisfy the six criteria in **9.1.4**.

9.2 Using planning conditions for biodiversity purposes

9.2.1 Conditioning biodiversity method statements (see D.2)

Conditions should be used where it is necessary to secure the design and implementation of measures intended to:

a) avoid adverse impacts or reduce the likelihood of adverse impacts occurring;

b) mitigate or reduce the effect of impacts on biodiversity;

c) compensate for impacts on biodiversity that do occur and that cannot be avoided or mitigated; or

d) secure biodiversity enhancements and other ecological benefits.

NOTE Method statements may be particularly suited to small-scale developments or to very specific situations and requirements on larger developments.

9.2.2 Conditioning restrictions and controls over development (see D.3)

Conditions should be used where it is necessary to restrict or control, or otherwise regulate, particular aspects or characteristics of the consented development that could harm biodiversity, such as:

a) imposing controls over the design and operation of lighting in order to avoid light pollution in any identified "sensitive" areas, ensuring that they remain sufficiently dark for nocturnal species;

b) imposing relevant timing restrictions on certain activities and operations to avoid sensitive times of year, e.g. to protected breeding birds or roosting bats;

c) restricting earth moving and/or the removal of vegetation outside of agreed periods of the year;

d) imposing necessary controls over the destruction, demolition, removal or alteration of features used by protected species;

*NOTE Where such works would result in an offence under wildlife legislation being committed (see Annex B), they might be controlled by a protected species licence (see **9.3** and **9.5.2**).*

e) limiting the duration or phasing of all or part of the development; and

f) securing the appointment of an ecological clerk of works (see **10.8**) to continually monitor, advise and report on identified works during construction (see **D.3.9**).

9.2.3 Conditioning biodiversity/ecological strategies, plans and schemes (see D.4)

Conditions should also be used where further specific information and/or details for the implementation of strategies, plans or schemes, already submitted as part of the application, are required for approval prior to commencement of development, or a specific phase of development, for example:

a) construction environmental management plans (CEMPs);

b) strategies for ecological monitoring and remedial measures;

c) ecological mitigation, compensation, enhancement and restoration plans;

d) landscape and ecological management plans (LEMPs); or

e) green infrastructure strategies or natural environment vision statements.

*NOTE 1 Biodiversity strategies, plans and schemes are likely to be more appropriate to larger, more complex development proposals where a number of biodiversity issues can be more efficiently incorporated into one comprehensive document. For example, where a number of biodiversity method statements are required (see **10.5**), these can be included or referenced in CEMPs which are often necessary for larger developments or those with multiple risks to the environment.*

*NOTE 2 Where the decision-maker considers it more appropriate, monitoring and land management may also be secured through a planning obligation (see **9.4**).*

9.2.4 Conditioning additional ecological investigations, surveys and assessments (see D.5)

The presence or absence of protected species, and the extent to which they could be affected by the proposed development, should be established before planning permission is granted; otherwise all material considerations might not have been considered in making the decision. The use of planning conditions to secure ecological surveys after planning permission has been granted should therefore only be applied in exceptional circumstances [3)], such as the following.

a) Where original survey work will need to be repeated because the survey data might be out of date before commencement of development.

b) To inform the detailed ecological requirements for later phases of developments that might occur over a long period and/or multiple phases.

c) Where adequate information (see **6.2**) is already available and further surveys would not make any material difference to the information provided to the decision-maker to determine the planning permission, but where further survey is required to satisfy other consent regimes, e.g. an EPS licence (see **9.3**).

d) To confirm the continued absence of a protected species or to establish the status of a mobile protected species that might have moved, increased or decreased within the site.

e) To provide detailed baseline survey information to inform detailed post-development monitoring.

9.3 Planning conditions and EPS licences (see D.6)

*COMMENTARY ON **9.3***

Where a European protected species might be affected, competent authorities need to have regard to the Habitats Directive [4] (see Annex B). The Habitats Directive [4] requires a system of "strict protection" for European protected species, and prohibits certain activities.

This requires the planning system to effectively prevent harm to such protected wild animals (e.g. the injury, killing and disturbance of protected wild animals, and the damage and destruction of their breeding sites and resting places, or the taking or destruction of their eggs).

[3)] In England: Circular 06/2005 [47], paragraphs 98 and 99; in Wales: TAN 5 2009 [40], paragraph 6.2.2; in Scotland: Scottish Planning Policy (SPP) [48], paragraphs 125-164, and PAN 60 *Planning for the Natural Heritage* [49]; in Northern Ireland: Planning Policy Statement 2 [50].

The Directive [4] does, though, provide a derogation for developments that satisfy the following three tests.

a) *There are no feasible alternative solutions to the development that are less damaging.*

b) *There are "imperative reasons of overriding public interest" (IROPI) for the development to proceed.*

c) *The proposal will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range.*

The prohibited activities are made criminal offences by the Habitat Regulations [7, 8 and 9][4]. It is, however, a defence for a person prosecuted to provide evidence that they are in receipt of a derogation licence.

The strict protection required by the Directive [4] is not limited to ensuring that no offence is committed. For example, where inadvertently harmful acts or many individually small but cumulatively significant acts by third parties are foreseeable consequences of a development, the development might not be acceptable (e.g. where individual motorists running over great crested newts crossing a road are not liable for road kill, but the cumulative impact of road kill might affect the favourable conservation status of the local population).

In order to discharge their obligations, planning authorities therefore need to consider the following.

a) *Is there a real risk that harm to the protected species would occur if the proposed development described in the application is carried out?*

b) *If so:*

   1) *Can the likely offence be avoided if appropriate preventative and/or mitigation measures are secured by planning conditions and/or through voluntary planning obligations (see **9.4**)?*

   Or, if not:

   2) *Can the three tests for a derogation be satisfied?*

Where the harm is liable to come directly from the development itself (e.g. disturbance from construction noise or destruction of a bat roost), the competent authority may grant permission only if it considers that the derogation tests are satisfied such that it is likely the applicant will be issued with an EPS licence by the relevant licensing body. In addition, where the harm is liable to be caused wholly or partly by activities consequent upon the development (e.g. incidental to otherwise lawful activities), then those activities also need to be considered when deciding whether the derogation tests are satisfied.

A competent authority therefore has to consider carefully how best to secure appropriate safeguards for legally protected species and, depending on the following circumstances, this may be achieved through either planning conditions/obligations or a protected species licence.

[4] In England and Wales under Regulation 9(5) of the Conservation of Habitat and Species Regulations 2010 [7].
In Scotland, under Regulation 3(4) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended [8].
In Northern Ireland under Regulation 3(4) of the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995, as amended [9].

9.3.1 Planning conditions should be used to secure a) method statements (see **D.2**) and/or b) controls and restrictions (see **D.3**) in situations where protected species are present and where it can be demonstrated that construction can proceed, without an offence being committed, if operations are subject to clearly defined measures capable of being controlled by the imposition of the conditions.

9.3.2 Where harm cannot be avoided (e.g. damage to or destruction of a bat roost) and/or the risk cannot be reduced to a reasonable level to avoid the risk of a criminal offence and prosecution, the applicant should apply for a protected species licence from the appropriate body (see **9.5**).

NOTE In Scotland, where there is any risk that an offence could occur, the proposed activity requires a license, even if the risk is reduced to a "reasonable level". However, no licence is needed if an offence can be avoided fully (e.g. through mitigation), which is the same as elsewhere in the UK.

9.3.3 If the competent authority is satisfied that the three derogation tests from "strict protection" under the Habitats Directive [4] (see Commentary on **9.3**) are met, it should impose a planning condition preventing the development from proceeding without first receiving a copy of the EPS licence or correspondence from the relevant statutory body stating that such a licence is not necessary (see **D.6.2**).

NOTE 1 National statistics [5] *show that the risk of criminal prosecution might not prevent harm from taking place, as only a small proportion of reported disturbances of protected species leads to conviction, and most incidents go unreported to the police. The "strict protection" condition therefore helps to ensure that a developer will apply for an EPS licence and, if they do not, can be prevented in advance from undertaking the activities that might jeopardize the protected species, before the species is harmed. The condition can be enforced by a temporary stop notice or by injunction.*

NOTE 2 In England and Wales, the use of planning conditions for this purpose has been established through case law [6] *and is also recommended in government planning advice* [7].

9.4 Planning obligations and other legal agreements

9.4.1 Planning obligations may be made by agreement between the decision-maker and the developer (those with a legal interest in the land), or unilaterally by the developer undertaking an obligation that would be enforceable by the decision-maker under planning legislation. Planning obligations should:

a) serve a planning purpose;

b) relate to the proposed development;

c) be related in scale and kind to the development proposed; and

d) satisfy the test of reasonableness.

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[5] Statistics from the UK National Wildlife Crime Unit, as reported in George and Graham 2012 [51].

[6] In the Judicial Review judgement for the Duke of Westminster vs WAG (Case No: CO/1872/03; the "Halkyn" Case 2004), paragraph 114 states: "The planning authority can, in an appropriate case, impose a condition that the developer may not proceed without a regulation EPS licence."

[7] Circular 06/2005 [47], paragraph 99, for England and TAN 5 [40], section 6.2.2, for Wales.

9.4.2 Where required, obligations should not duplicate conditions and, like conditions, they should be necessary to make an otherwise unacceptable development acceptable.

9.4.3 Where planning conditions are appropriate, these should be used in preference to planning obligations. Planning obligations should be used to permit the provision of positive benefits or ongoing forms of control or management, and may be used to secure:

a) biodiversity measures off site and outside of the planning application's boundary, e.g. outside the "red line";

b) financial provisions for lump sum or periodic payments (e.g. towards long-term management of biodiversity features);

c) biodiversity offsetting;

d) the resolution of land management issues;

e) arrangements for monitoring the effectiveness of mitigation measures and, importantly, deciding on remedial measures when necessary;

f) the provision of off-site surveys/monitoring;

g) the provision of land to be used as a nature reserve or geological conservation site;

h) the creation of new rock or fossil exposures;

i) new habitat creation schemes;

j) habitat or species translocation schemes; and

k) provision of access, information or interpretive facilities.

NOTE 1 Planning obligations may be secured through section 106 of the Town and Country Planning Act 1990 [33] (England and Wales), section 75 of the Town and Country Planning (Scotland) Act 1997, as amended [52], or article 40 of the Planning (Northern Ireland) Order 1991, as amended [21], legal agreements that are bespoke to the individual development (or in some circumstances, a small pool of developments), or through the Community Infrastructure Levy which sets a standard tariff for developer contributions and can include green infrastructure provision and maintenance. Specific guidance can be obtained from the DCLG webpage: (http://www.communities.gov.uk/planningandbuilding/).

NOTE 2 As an alternative to planning obligations, under Section 39 of the Wildlife and Countryside Act 1981, as amended [1], local authorities may also enter into a legal management agreement with any person having an interest in a piece of land, for the purpose of conserving or enhancing the natural beauty and amenity of that land or for promoting its enjoyment by the public.

9.5 Other consent regimes

9.5.1 General

When seeking planning permission, developers should consider what, if any, other types of consent might be required (see **9.5.2**) that are granted by other regulators and statutory bodies.

NOTE Annex E provides a summary of various consents that an applicant may be required to obtain in addition to their planning permission. The annex also identifies particular works that are likely to require such approval and the appropriate consenting body to be contacted.

Some consents for development or works that have the potential to create significant effects on biodiversity may be applied for prior to, alongside or after a planning application is made (if the latter is required at all). The need and appropriate timetable for submission for such applications should therefore be established with the relevant body at the earliest opportunity.

9.5.2 Other local authority consents

In addition to the planning function, the Habitats Directive [4] applies to local authorities (as decision-maker) when they grant consent through other consent regimes for which they are responsible. The decision-maker should therefore have regard to the requirements of the Directive and statutory obligations (see Commentary to **9.3**), in situations where European protected species (EPS) are likely to be harmed, when determining applications involving:

a) demolition notices;

b) tree preservation orders; and

c) listed building and conservation area consents.

*NOTE The decision-maker may find the EPS pro forma (see **6.3.4** and **6.8**) to be a useful summary document to aid their decision-making. The pro forma is available on the Biodiversity Planning Toolkit web site: http://www.biodiversityplanningtoolkit.com/stylesheet.asp?file=282_summary_eps_pro_forma*

9.5.3 European protected species licences

9.5.3.1 Where the developer considers, on the basis of advice from either their ecological consultant or the decision-maker, that offences affecting European protected species cannot be avoided, an EPS licence should be sought from the appropriate statutory nature conservation body (see Annex E).

NOTE Licences might also be required in relation to other species where offences cannot be avoided, including badgers (under the Protection of Badgers Act 1992 [24]) and water voles and white-clawed crayfish (under the Wildlife and Countryside Act 1981, as amended [1]). Licences in relation to water voles and white-clawed crayfish cannot be issued for development purposes and are therefore issued as conservation licences.

9.5.3.2 Normally, EPS licences and licences relating to other nationally protected species are not issued until full planning permission is in place and/or outline consent with conditions related to wildlife discharged (where they are capable of being discharged). Licence applications should not be submitted until all necessary evidence that the development will proceed (including planning and/or other relevant consent) is available.

9.5.3.3 To minimize delays at the licensing stage, the developer and ecological consultant should plan for licensing needs early in the process, ensuring that surveys and mitigation proposals meet published licensing requirements and that legal safeguards are in place, if required, to protect the proposed mitigation measures. Deviations from the licensing requirements should be justified in the application.

*NOTE Where delays occur between the planning process and the application for a licence, repeat surveys might be necessary to ensure up-to-date information to inform licensing decisions (see **9.2.4**).*

9.5.3.4 Proposals (mitigation/compensation) to support the licensing stage should be proportionate to the impacts on the protected species.

NOTE If a developer wishes to add additional compensation, the decision-maker is unlikely to object, but over-mitigation is unlikely to secure a licence if the application is flawed, e.g. lacking suitable survey data.

9.5.3.5 For phased or multi-plot developments, a master plan and some form of site-wide ecological and/or landscape design strategy (see **9.2.3** and **D.4.5**) and an ecological management plan [often referred to as a LEMP [see **9.2.3**d) and **D.4.5**] should form part of the application, setting out a holistic approach to the wider development area to ensure necessary site safe guards are in place.

*NOTE Repeat surveys might also be necessary following the first licence application, especially for developments which are to be phased over several years (see **D.5**).*

9.5.3.6 Proposed timetables for licensable activities should allow the maximum windows for activities within the seasonal constraints that apply to the protected species, thereby allowing for slippage and reducing the need for frequent or unnecessary licence or planning consent modifications.

NOTE In England, for Nationally Significant Infrastructure Projects an alternative process is available that accounts for the need to agree mitigation proposals in advance of submission of the Development Consent Order application. Natural England ought to be contacted as early as possible by a developer taking forward a Nationally Significant Infrastructure Project where there is a potential to affect European protected species.

10 Implementation of development: biodiversity on construction sites (Stage 5)

*COMMENTARY ON **10***

If undertaken without due care, construction activities can have a devastating effect on a very wide range of biodiversity features on site. Modern construction machinery is extremely powerful and can move tonnes of material in minutes, causing irreversible damage in an extremely short space of time. Even a modest project on a small site has the potential to damage or otherwise adversely affect biodiversity. For example, a barn conversion could affect protected species such as bats and breeding birds. The Construction (Design and Management) Regulations 2007 (CDM Regulations) [32] might impose specific requirements (see Annex F).

10.1 General

10.1.1 Whether a project is large or small, consideration should be given to biodiversity on all sites during the period when development is being implemented or constructed.

NOTE CIRIA's Working with Wildlife: Guidance for the Construction Industry [N7] provides valuable guidance and many useful working practices for construction contractors.

10.1.2 The level of detail required, the integration with other technical disciplines and the practical measures to be taken should be proportionate to both the scale of the development and the potential risks to biodiversity. Consequently, for smaller projects, one or more method statements (see **10.2.2**) and/or specific restrictions and controls (see **10.2.2**) might be adequate to safeguard biodiversity interests. However, for larger and/or more complex developments the preparation and implementation of a comprehensive construction environmental management plan (CEMP) should be considered as most appropriate (see **10.2**).

10.1.3 The appropriate decision-maker should secure good working practice on sites for the period during the development's implementation or construction through the imposition of appropriate planning conditions, obligations and/or protected species licences (see **9.2**, **9.3** and **9.4**).

10.1.4 Ecologists and any contractors working for ecologists should be aware that the CDM Regulations 2007 [32] are likely to apply where an ecologist's work involves a design element, providing a specification or advising on or directing the activities of a construction contractor (see Annex F).

NOTE The CDM Regulations [32] place legal duties on virtually everyone involved in construction work, both commercial and domestic. The responsibilities of ecologists are given in the Health and Safety Executive Approved Code of Practice (ACoP) L144 [53].

10.2 Construction environmental management plan (CEMP)

*COMMENTARY ON **10.2***

Many construction companies now prepare and implement some form of environmental management system (EMS), such as that specified in BS EN ISO 14001. For site work, these often translate into a construction environmental management plan (CEMP) or something similar for other developments (e.g. mineral developments and demolition works). The purpose of a CEMP is to ensure that adverse environmental effects of development activities are mitigated.

Local planning authorities have an important role to play in encouraging and enforcing the implementation of an appropriate CEMP and have various means, under planning and wildlife legislation (see Annex B), to enforce the requirements of a CEMP, including powers to enforce conditions and to of prosecute any criminal offences committed. An ecologist appointed by the developer or construction contractor can help monitor site activity, but enforcement is the responsibility of the local authority (e.g. active monitoring of development sites within their area). The police may also take action over reported wildlife crime.

10.2.1 Where the nature of the development proposals requires the provision of a CEMP, specific biodiversity measures prepared by a competent person should be included, attached or referenced within the CEMP to address the adverse effects of the implementation and construction-related activities.

10.2.2 While the format of a CEMP can vary between different construction companies, it should be proportionate and tailored to the specific needs of a project. Also, the biodiversity elements should all have a common structure, and be based on the following considerations, as appropriate.

a) Risk assessment of potentially damaging construction-type activities (see **10.3** and Annex G).

b) Identification of "biodiversity protection zones" (see **10.4**) and areas where invasive species have been identified.

c) Inclusion of or reference to details for implementation of method statements required to achieve specific biodiversity outcomes, and particularly mitigation measures (see **10.5**).

d) Identification of practical measures, both physical measures and sensitive working practices to avoid impacts during development, for protecting biodiversity through the control or regulation of construction-type activities (see **10.5**).

e) The location and timing of sensitive works (see **10.6**) to avoid harm to biodiversity features.

f) The times during construction or development implementation (see **10.6**) when particular specialists (see **10.8**) need to be present on site to oversee works.

g) Responsible persons and lines of communication (see **10.7**).

h) Defining and communicating the role and responsibilities on site of an ecological clerk of works (ECoW), or appointed ecologist(s) responsible for managing biodiversity issues on site, and times and activities during construction or development implementation when they need to be present to oversee works (see **10.8**).

i) Use of exclusion fences, protective barriers and warning signs (see **10.9**).

10.3 Risk assessment of potentially damaging development activities

To inform the preparation of the CEMP, a risk assessment should be carried out on all proposed construction-type activities likely to impact upon important biodiversity on site (see Annex G). The risk assessment should normally relate to the ECOP (see **5.4**) and should identify areas of potential conflict where proposed development activities could impact on biodiversity features.

10.4 Identification and protection of biodiversity protection zones

As informed by the risk assessment (**10.3**), the CEMP should include appropriate scale plans that identify:

a) important habitats, species and/or other biodiversity features, and related resources (e.g. soils) and existing hazards (e.g. areas of identified invasive species) that are to be retained and protected during construction or implementation of the development;

b) areas that are to be restricted for some or all construction-type activities for the whole or part of the construction/implementation process;

c) areas where protective measures (e.g. fencing) are to be installed and maintained; and

d) approved layout and areas for construction-type activities necessary to implement the proposed development.

10.5 Practical measures to avoid or reduce impacts during construction

The CEMP should set out all necessary practical measures to ensure that biodiversity features are protected during construction or development implementation, including some or all of the following, as appropriate to the scale of the development and the risks to biodiversity.

a) Siting and timing of all construction-type activities to avoid harm to important nature conservation features (see **10.6**).

b) Erection of fences (see **10.9**) to protect sensitive biodiversity features specifying type, location and means of installation.

c) Erection of information or warning signs for site workers specifying location, type and means of installation.

d) Erection of wildlife exclusion barriers (see **10.9**) to prevent, where necessary, particular species (e.g. water voles, badgers, amphibians and reptiles) from moving from one area or feature to another.

e) Direction of security/construction lighting away from protection zones, tree canopies and watercourses.

f) Regular inspection and maintenance of wildlife exclusion barriers and protective fences to ensure they remain fit for purpose.

g) Monitoring and provision of advice by an ecologist (or other competent person) of specified destructive activities, e.g. vegetation clearance, hedgerow removal, tree felling or surgery, soil stripping, full or partial demolition of buildings and structures, roof stripping and removal.

h) Species rescue and translocation.

i) Provision of temporary shelters during construction/implementation for vulnerable species e.g. barn owl boxes and bat roosts.

j) Containment, control and removal of invasive non-native species (e.g. Japanese Knotweed).

k) Biosecurity protocol or method statement to prevent the introduction and spread of invasive non-native species and pathogens between sites.

l) Measures and inspections to ensure that wildlife does not become trapped in pipes, excavations or machinery.

m) Training and awareness: provision of information to all site workers explaining the importance of sensitive features and any associated protection measures.

n) Protection against vandalism, e.g. security fencing around equipment/ materials that could cause pollution.

o) Procedures to avoid pollution incidents, e.g. from fuel spills or site run-off, based on an understanding of the wildlife interest at risk.

p) Contingency/emergency measures for accidents and unexpected events, for example:

   1) pollution incidents, e.g. use of spill kits with machinery;

   2) dealing with previously unrecorded protected species found during construction/implementation;

   3) unexpected bad weather;

   4) other unforeseen causes of delay; and

   5) repair of damaged areas and features.

q) Temporary management of existing wildlife features during construction/ implementation, e.g. hay cuts.

r) Regular review of mitigation measures throughout the construction/ implementation process to monitor their effectiveness and compliance with legal, planning and/or contractual requirements.

s) Maintenance of records and regular review of environmental procedures to identify and report issues to site managers and project team, identifying remedial action where necessary.

NOTE For England and Wales, more details on non-native invasive species can be found on the web site of the Non-Native Species Secretariat (NNSS) at: https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm; for Scotland, at: https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm; and for Northern Ireland, at: http://www.doeni.gov.uk/niea/biodiversity/sap_uk/invasive_alien_ species.htm

10.6 The timing of sensitive works

The CEMP should include a rolling timetable showing:

a) when specific measures to avoid or reduce impacts (see **10.5**) are to be carried out; and

b) phasing of construction-type activities to ensure that proposed works are aligned with any ecological and legal constraints, e.g. bird nesting season or activities controlled through planning conditions and obligations (see **9.2**, **9.3** and **9.4**) or an appropriate species licence (see **9.5**).

10.7 Responsible persons and lines of communication

10.7.1 To ensure that the project team and interested parties know who to liaise with, who the client is and which person is undertaking each required task, the CEMP should provide details of personnel and lines of communication necessary for its full implementation, including those responsible for providing the following in relation to biodiversity conservation.

a) Advice and monitoring in relation to regulations, legal consents, planning conditions, environmental procedures and contractual arrangements.

b) Correct installation and maintenance of physical protection measures.

c) Training and toolbox talks for staff.

d) Contingency measures in the event of an accident or occurrence of other potentially damaging incidents.

e) Periodic reporting on the success of a) to d) as required, for example, by planning conditions.

10.7.2 The CEMP should identify, with input from the client, project manager and competent ecologists, etc., as appropriate, those situations during the construction/implementation period where an ecological clerk of works (see **10.8**) is required.

10.8 The role of an ecological clerk of works

*NOTE 1 Many of the activities undertaken by an ecological clerk of works may be secured through planning conditions or a protected species licence (see Clause **9**).*

NOTE 2 As with health and safety, responsibility for biodiversity protection lies with all personnel on site.

10.8.1 The specific role and responsibilities for an ecological clerk of works (ECoW) to be engaged for a project (i.e. to continually monitor, advise and report on the works in relation to ecology and biodiversity) should be made explicit within the CEMP or other appropriate document submitted to the decision-maker. This may include:

a) desk-top work: site and project familiarization, including input into the preparation, review and update, where necessary, of:

   1) the ECOP and risk assessment (see **5.4** and **10.3**);

   2) ecological constraints and biodiversity protection zones (see **10.4**);

   3) practical measures to avoid and reduce impacts during construction/implementation (see **10.5**);

   4) method statements required to achieve ecological mitigation, compensation or enhancements associated with non-construction related impacts (see **9.2** and Annex D); and

   5) timing of sensitive works during construction/implementation (see **10.6**);

b) on site: monitoring and provision of advice, or practical undertaking of ecological works:

   1) practical measures to avoid or reduce construction/implementation impacts (see **10.5**);

   2) implementation of method statements (see **9.2**) to secure ecological mitigation, compensation and enhancements that are additional to construction/implementation impacts (e.g. for habitat removal and reinstatement); and

   3) micro-siting of works;

c) provision of training and information, e.g. through "site inductions" and toolbox talks;

d) monitoring and reporting on compliance with legal, planning and contract requirements;

e) investigation and reporting of unplanned incidents (e.g. pollution, damage to habitats, unexpected occurrence of protected species, implications of delays due to bad weather);

f) maintenance of records and regular reporting of outcomes to site managers, the project team, decision-makers and consultees;

g) monitoring post-construction/implementation success of mitigation methods and aftercare of sensitive habitats and features; and

h) provision of further advice to the client on any of the above as necessary.

10.8.2 An ecological clerk of works should be able to demonstrate a level of experience and competence (see Clause **4**) commensurate with the complexity of the role needed on site to deal with the wide range of ecological issues likely to be encountered and to adapt to new and unforeseen challenges raised by development activities. Where junior or inexperienced ecologists are placed in this role they should be adequately supported on site by more senior staff who do have appropriate experience and levels of competence, and the latter should be accessible to give advice and guidance at all times.

NOTE This role may also be performed by the involvement of a number of competent persons with differing skill sets, provided written instructions to cover all contingencies are implemented and that a demonstrable and effective management structure within the project team is made available so that team members understand their own remit and responsibilities.

10.8.3 Copies of all ecological reports relevant to sites works (that have been prepared to inform a development proposal), as well as copies of relevant planning conditions and protected species licences, should be kept in an office on site and be available to the ECoW and site/project manager at all times so that they are familiar with all identified ecological issues relating to the proposal.

10.9 Protective fencing, wildlife exclusion barriers and warning signs

10.9.1 The ecologist or ECoW should advise on the type of protective fencing or wildlife exclusion barriers required to protect various features on site and/or to exclude particular wildlife from specific areas. Fencing and barriers should be proportionate to the value of the biodiversity feature, the predicted degree of risk, the duration required and the nature and scale of the development.

10.9.2 Particularly important biodiversity features [8)] that are also identified as being especially vulnerable and at risk of harm from construction-type activities (see **10.3**, **10.4** and Annex G), should be protected by robust fencing. This specification should be reduced proportionately where professional judgement (see **4.4**) is able to demonstrate a reduced risk and where less robust fencing would suffice.

10.9.3 Protective fencing should be erected before any materials or machinery are brought onto the whole or part of a site where a risk has been identified, and before any demolition, development or removal of soil or vegetation commences. Once erected, barriers should not be removed or altered without prior recommendation by an ecologist and (where required as a part of a planning condition) approval in writing by the decision-maker. Appropriate signage should be installed on this fencing in appropriate numbers and locations to inform people of the importance of the features it protects and the need to avoid moving the fencing without authorization.

10.9.4 The use of plastic tape, etc., instead of fixed fencing should be considered only in situations where very temporary protection is needed and should be restricted to operations where on-site ecological monitoring and advice, e.g. as provided by an ECoW (see **10.8**), is available throughout the operations that pose a risk.

*NOTE Plastic tape is rarely a substitute for robust permanent fencing described in **10.9.1** to **10.9.3**.*

10.9.5 Wildlife exclusion fencing/barriers (e.g. for badgers and amphibians) should conform with good practice guidelines (see, for example, Natural England's specification for newt fences in the *Great crested newt mitigation guidelines* [54] and specifications in any other approved documents, e.g. in protected species licence method statements).

10.9.6 Warning signs should be fixed securely in appropriate locations (e.g. next to sensitive features) and should explain to construction site personnel why certain areas or features are being protected for part or for the whole duration of the development. They should be written in plain language and should be large enough to be visible and clearly legible from the cab of any construction machinery that might be operating in close proximity. Lost or damaged signs should be replaced at the earliest possible opportunity.

10.9.7 The purpose of protective fencing, wildlife exclusion barriers and warning signs, and the potential consequences of removing or damaging them, should be explained to all site personnel, e.g. through appropriate toolbox talks (see **10.7** and **10.8**).

[8)] Particularly important features include those sites and species protected by law, non-statutory locally designated wildlife sites, and priority habitats and species of principal importance for biodiversity conservation.

11 Post-development: land management and performance review

11.1 Post-development management of habitats and species

NOTE Biological communities are constantly changing and require positive action to maintain their conservation value. Preparation and implementation of a bespoke management plan provides a convenient means of achieving this.

11.1.1 In order to provide clarity and certainty over what is being provided, and to enable adequate resources to be identified and allocated, plans for the long-term management of habitats, species and other biodiversity features should include the following.

a) Description and evaluation of features to be managed.

b) Ecological trends and constraints on site that could influence management.

c) Aims and objectives of management.

d) Appropriate management options for achieving aims and objectives.

e) Prescriptions for management actions.

f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five year period).

g) Body or organization personnel responsible for implementation of the plan.

h) Monitoring and remedial measures (see **11.2**).

i) Funding resources and mechanisms to ensure sustainable long-term delivery of the proposed management.

*NOTE While plans setting out proposals for long-term management are often secured through planning conditions (see **9.2** and **D.4.5**), the funding provisions may be more appropriately secured through planning obligations (see **9.4**). If a planning obligation, instead of a condition, is used to secure long-term management plans, the agreement ought to provide for the inclusion and delivery of the elements set out in a) to i).*

11.1.2 Wherever possible, management of biodiversity features should be coordinated with other site management requirements, and especially with the management of landscape features where there is often considerable overlap of aims, objectives and necessary management actions. This may be achieved through the preparation of an integrated landscape and ecological management plan (LEMP) (see **9.2.3** and **D.4.5**).

11.1.3 The level of detail required for any given site should be that which is necessary to ensure the effective management of the biodiversity features present. The approach to management planning should remain flexible, so that time, money and energy are not expended on the implementation of non-essential or inappropriate management works. For some large and complex sites containing a variety of biodiversity and landscape features, a comprehensive management plan covering a broad range of management works should be prepared (e.g. a LEMP). However, on smaller sites the preparation and implementation of full-scale management might be beyond the resources available or simply be unnecessary. In such circumstances, an outline management document may be prepared.

11.2 Monitoring and reporting biodiversity outcomes

11.2.1 General

Monitoring should be undertaken to:

a) ensure compliance with planning conditions/obligations and/or protected species licensing requirements imposed by the decision-maker (see **9.2, 9.3**, **9.4** and **9.5**); and

b) establish the success and effectiveness of measures undertaken to avoid, mitigate or compensate for impacts and/or to achieve biodiversity enhancements.

11.2.2 Compliance monitoring and enforcement

Where monitoring identifies non-compliance with planning conditions or licensing requirements, enforcement powers are available and should be used where appropriate by the relevant decision-maker (e.g. local planning authority or licensing body).

NOTE In addition to their planning enforcement powers, local authorities have powers to prosecute wildlife crime under Section 25(2) of the Wildlife and Countryside Act 1981, as amended [1], and the Wildlife (Northern Ireland) Order 1985, as amended [2] (through the Northern Ireland Environment Agency).

11.2.3 Effectiveness monitoring

*COMMENTARY ON **11.2.3***

There is currently very little comprehensive and objective data within the planning system to show what overall net effect development has on biodiversity and the scale of either losses or gains in habitats and other features.

In the past, there was no nationwide or standardized system of recording net losses and gains, and ecological reports often do not make explicit what changes will occur. However, it is not unreasonable for a decision-maker to expect the applicant to provide them with a clear and transparent summary of the likely change in biodiversity if they grant planning consent.

*Such information helps decision-makers to demonstrate how they are fulfilling their duty to have regard to the conservation of biodiversity in the exercise of the planning function (see **B.1** and **B.2**).*

In Scotland it is a duty under the Wildlife and Natural Environment (Scotland) Act 2011 [26] for public bodies to report on their compliance with the biodiversity duty, which requires them to "further the conservation of biodiversity".

It is a condition of all EPS licences that a return be submitted to the licensing authority, reporting on the activities carried out under licence.

11.2.3.1 In order to assess the effectiveness of proposed conservation measures, applicants, their ecological consultants and decision-makers should work together to identify and record the likely net change in biodiversity that will occur as a result of both the "alone" and "in-combination" effects of new development. To achieve this:

a) applicants should first provide a clear and simple summary of predicted losses and gains for biodiversity when they submit their planning application (see note, **6.5** and **8.1**); and

b) then, prior to determination, the applicant and decision-maker should agree and make any necessary adjustments to the "initial summary of predicted losses and gains", as may have been identified through detailed consideration of the application during the decision-making stage (see **8.5**).

NOTE An example of a biodiversity "net losses and gains form" is available on the Biodiversity Planning Toolkit web site at: http://www.biodiversityplanningtoolkit.com/stylesheet.asp?file=281_summary_of_net_loss_and_gain_form

11.2.3.2 The summary produced as a result of **11.2.3.1**b) should be regarded as a "baseline statement of predicted change" prior to the commencement of development. However, it is often the case that predicted biodiversity outcomes, upon which the planning consent is based, are not always actually achieved. This is especially so in situations where it is not possible to guarantee in advance the full effectiveness of the proposed measures. Therefore, where the decision-maker is concerned that proposed measures might be ineffective and/or fail to achieve desired outcomes (i.e. where losses and adverse effects are not adequately mitigated or compensated), post-development monitoring should be secured as part of the planning consent (see **9.2.4**). Such monitoring should establish whether proposed mitigation, compensation and enhancements measures have achieved the desired outcomes secured through the planning permission.

11.2.3.3 At the end of the monitoring period, the results should be used to complete a "final statement of losses and gains" arising from the development. This should identify the actual changes that have occurred, as opposed to what was only predicted prior to the commencement of development.

NOTE Recording what is actually implemented might also be useful when administration of another consent regime, such as for EPS licensing, introduces alternative requirements after the grant of planning consent, leading to a different final recorded change in biodiversity to that expected at the time when the baseline statement was completed.

11.2.3.4 Monitoring the effectiveness of various biodiversity measures should be based on sound ecological principles and scientific methods of study (see **6.10**), and undertaken systematically with a clearly identified purpose. Details should include:

a) purpose, aims and objectives of monitoring;

b) identification and provision of data describing adequate baseline conditions prior to the start of development;

c) appropriate success criteria, thresholds, triggers and targets against which the effectiveness of the various conservation measures being monitored can be judged;

d) methods for data gathering and analysis;

e) location of points and areas where monitoring will be undertaken;

f) timing and duration of monitoring;

g) responsible persons and lines of communication;

h) review and, where appropriate, publication of results and outcomes; and

i) adaptive management (e.g. contingencies and remedial actions) that will be implemented if monitoring shows proposed measures to be ineffective or not reaching their stated aims and objectives.

*NOTE Monitoring may be secured either through appropriate planning conditions (see **9.2, 9.4** and **D.4.2**) or as part of a planning obligation relating to the provision of wider benefits and measures.*

11.2.3.5 Where the results from monitoring show that conservation aims and objectives are not being met, the monitoring report should set out how contingencies and/or remedial action are to be identified, agreed with the decision-maker and then implemented.

NOTE This is necessary to ensure that the development still delivers the fully functioning biodiversity components of the original scheme for which planning permission was granted.

11.2.3.6 For small-scale applications, long-term ecological monitoring might not be necessary or appropriate. All that might be required is for the applicant to demonstrate that biodiversity measures undertaken as part of the development have been implemented in accordance with biodiversity conservation good practice, for example, the provision of bird boxes or the installation of bat roosting features undertaken through a method statement (see **9.2.2** and **D.2.1**). In such a case, rather than requiring ongoing monitoring, the decision-maker should secure (via a planning condition) the submission of a brief "statement of good practice". This statement should, on completion of the development, be signed by a competent ecologist involved in the project, confirming that specified and consented biodiversity measures have been implemented in accordance with the good practice upon which the planning consent was based.

NOTE For example, a brief signed statement, along with a photographic log of "work-in-progress", might be all that is necessary to show that a particular measure (i.e. a new bat roost, bat box or bird box) has been installed in accordance with good practice. Such an approach is considered proportionate for small-scale developments and avoids the need for ongoing post-development monitoring, thereby saving the associated additional costs that might otherwise be involved.

11.2.4 Collation and analysis of monitoring results

11.2.4.1 Working in partnership, local planning authorities, statutory bodies and other nature conservation organizations (e.g., Local Nature Partnerships in England or Local Biodiversity Action Plan Partnerships in Wales) should collate the information from "baseline" and/or "final statements of loss and gain" in their area in order to obtain an annual aggregated total of overall biodiversity change arising from development.

NOTE The annual results from each local authority area may be compiled into a national data set by organizations wishing to report on overall losses and gains to biodiversity arising from the development process. It might be appropriate for such data to be stored and managed locally by local biodiversity records centres and nationally through the Biodiversity Action Reporting System (BARS).

11.2.4.2 Decision-makers should use the aggregated results from monitoring, where available, to assist them in ecological assessments of planning applications where they have a statutory obligation to consider in-combination and/or cumulative impacts from multiple developments. The results from monitoring should also be used to inform the design and delivery of biodiversity measures associated with future development proposals.

11.2.4.3 Relevant government departments, statutory bodies and other conservation organizations should also use the aggregated results from monitoring to establish the extent to which the planning and development system is contributing towards EU and UK national targets to halt the loss of biodiversity and the degradation of ecosystem services by 2020.

NOTE See European Commission: Our life insurance, our natural capital: an EU biodiversity strategy to 2020 [55] and JNCC and Defra: UK Post-2010 Biodiversity Framework [56].

Annex A (informative) Determining the "significance" of impacts

A.1 General

Throughout the UK, national planning policy encourages planning decisions to achieve sustainable development by ensuring that economic, social and environmental gains are sought jointly and simultaneously. In order to arrive at an appropriate planning decision, the decision-maker ought therefore to consider the positive and negative effects of the proposed development, weighing all the advantages and disadvantages. It follows that determining the "significance" of the anticipated effects arising from a proposed development becomes a key task within the planning process. This requires both the affected resource(s) and the potential impact(s) associated with the proposal to be examined, so that appropriate weight can be attached to any significant environmental harm or benefits.

In general terms, a "significant impact" is an effect which is important, notable, or of consequence, having regard to its context. Whether an action is likely to have a "significant" impact depends upon the "sensitivity" of the resource that is affected (including consideration of such factors as its scientific and social value, its status, condition and quality), and upon the "magnitude" (including consideration of the extent, duration, intensity, reversibility and timing, etc.) of any likely impacts. It follows that the greater the sensitivity of the resource affected, the lesser the magnitude of change that would result in an effect that could be significant in the relevant context.

In the planning process, the term "significant" is used formally in the EIA Regulations [10, 11] and in the Habitats Regulations [7, 8 and 9], in each case as a threshold to trigger assessment.

A.2 Significance under the EIA Regulations [10, 11]

Under the EIA Regulations [10, 11], a significant effect is simply one that is sufficiently important to require assessment and reporting so that the decision-maker is adequately informed as to the environmental consequences of permitting the project. It does not necessarily equate to an effect so severe that consent for the project is to be refused planning permission. This is obviously the case because many projects with significant adverse ecological effects have been lawfully permitted following EIA procedures.

A.3 Significance under the Habitat Regulations [7, 8 and 9]

Consideration of "significance" under the Habitat Regulations [7, 8 and 9] requires a similar consideration to that under the EIA Regulations [10, 11], although it has been embellished by European and domestic case law. It also depends on the context and whether effects are being considered in relation to European sites or European protected species.

For European sites, there is a step-wise process to be followed to ensure that plans and projects do not adversely affect the integrity of the sites. The first step (often referred to as the "screening test") is to establish whether there would be a "likely significant effect'"(LSE). If so, the plan or project is to be subject to assessment to inform the decision-maker as to whether there would be an "adverse effect on the integrity" of the European site.

The courts have ruled that in the first test (LSE) an effect is to be regarded as "significant" if it could undermine the published conservation objectives of the site. In establishing if this is "likely", it is not necessary for a significant impact to be a probability or certainty; rather, there need only be a possibility or real (rather than hypothetical) risk of it occurring.

The LSE test therefore acts as a trigger for the decision-maker to undertake the "appropriate assessment" and to ascertain that there would not be "an adverse effect on the integrity" of a site. This second test (often referred to as the "integrity test") is at a higher level and equates an adverse effect on integrity with an effect so severe that (in the absence of alternative solutions or some imperative reason of overriding public interest) the plan or project is to be refused automatically.

For European protected species, a significant effect is used in relation to actions likely to lead to the disturbance of animals that would affect the local distribution and abundance of the species concerned [9]. Case law has established that what constitutes "significant" under these circumstances needs to be considered on an individual case-by-case basis [10].

NOTE The Wildlife and Countryside Act 1981, as amended [1], does not use the term significance at all when referring to harm to nationally protected species.

A.4 Significance under planning policy

The term "significant" is used within government planning policy, although there is no clear definition or threshold of what is meant by a significant effect. However, planning policy consistently states that significant harm resulting from a development that cannot be addressed through the mitigation hierarchy (e.g. avoided, such as locating on an alternative site with less harmful impact, or adequately mitigated, or as a last resort compensated for) is sufficient justification to refuse planning permission.

NOTE See, for example, National Planning Policy Framework [41], paragraph 118.

A.5 Significance: a practical approach that can be applied at all levels

Planning applications ought to be determined in accordance with the local development plan, unless material considerations indicate otherwise. Where biodiversity resources are affected, positively or negatively, this is likely to involve considering whether:

a) the social, economic or environmental benefits of the proposed development are sufficient to outweigh any harm to biodiversity;

b) the biodiversity benefits are sufficient to help outweigh any harm to social, economic or other environmental interests; and/or

c) any significant harm to biodiversity can be avoided, mitigated or compensated for by technically and ecologically feasible measures that are capable of being secured through planning conditions or a planning obligation.

A fair and equitable weighing up of the relative significance of a) to c) is therefore critical to decision making.

In both legal and policy terms a key issue for the decision-maker is to decide whether, in any particular case, "the significance of the impact" is sufficient to warrant the grant or refusal of planning permission. If it could otherwise result in refusal, the decision-maker is to consider whether such unacceptable development could be made acceptable through the use of appropriate planning conditions and/or planning obligations.

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[9] For example: in England and Wales under Regulation 41(2)(b) of the Habitat and Species Regulations 2010 [7].

[10] Supreme Court Ruling (2011) *Vivienne Morge v Hampshire County Council [2010] EWCA Civ 608.*

A practical approach to identifying what might constitute a significant effect is to consider:

1) whether the effect on biodiversity is to influence the balance of planning considerations and therefore the decision as to whether planning permission is likely to be refused or granted; and

2) if planning permission is granted, whether the effect is one that is important enough to warrant the use of planning conditions and/or obligations to guarantee proposed measures or to impose restrictions, or to seek further requirements (e.g. for mitigation, compensation, enhancement, monitoring or site management).

Consequently, if an effect is sufficiently important to be given weight in the planning balance or to warrant the imposition of a planning condition, e.g. to provide or guarantee necessary mitigation measures, it is likely to be "significant" in that context at the level under consideration. The converse is also true: insignificant effects would not warrant a refusal of permission or the imposition of conditions.

This approach can be used for most applications, because the significance is determined by a case-specific assessment of the importance (sensitivity) of the site, species or feature within the conservation hierarchy and the scale (magnitude) of the effect upon it.

Annex B (informative) Biodiversity and the law

B.1 General

In England and Wales, every public authority needs to have regard to the purpose of conserving biodiversity in so far as that is consistent with the proper exercise of their functions [11)]. In Northern Ireland and Scotland similar statutory obligations require that all public bodies further the conservation of biodiversity in the exercise of their functions [12)].

B.2 Statutory obligations for competent authorities in relation to European sites

Throughout the UK, local planning authorities are competent authorities for the purposes of the Habitats Regulations [7, 8 and 9] (see Column 2, Table B.1) and as such they have regard to all relevant requirements of the regulations.

B.3 Legal protection for biodiversity

In addition to the protection provided for habitats and species of European importance by the Habitat Regulations [7, 8 and 9] (see Column 2, Table B.1), further protection is also provided for habitats and species of national importance (see Column 3, Table B.1).

B.4 Designated sites

The Habitats Regulations [7, 8, 9] (see Column 2, Table B.1) provide the framework of protection for European Natura 2000 sites [i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)] within the planning system.

In England, Scotland and Wales, section 28 of the Wildlife and Countryside Act 1981, as amended [1], provides the statutory protection frameworks for Sites of Special Scientific Interest (SSSIs).

In Northern Ireland, Part 4 of the Environment (Northern Ireland) Order 2002, as amended [14] makes provision for the declaration and management of Areas of Special Scientific Interest (ASSI).

B.5 Habitats

In addition to habitats protected by statutory legislation, other habitats of principal importance for the purpose of conserving biodiversity (i.e. the list "priority habitats") have been identified by relevant national legislation.[11), 12)]

B.6 Protected species

The Habitats Regulations [7, 8, 9] (see Column 2, Table B.1) provide the framework for strict protection of European protected species.

National legislation also provides the statutory protection for species at a domestic level, including provisions for licensing otherwise illegal activities.

In addition to species protected by statutory legislation, other species of principal importance for the purpose of conserving biodiversity (i.e. the list "priority species") have been identified by relevant national legislation.[11), 12)]

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11) Section 40 of the Natural Environment and Rural Communities Act 2006 [6].

12) In Northern Ireland, section 1 of The Wildlife and Natural Environment (Northern Ireland) Act 2011 [15] and in Scotland, section 1 of The Nature Conservation (Scotland) Act 2004 [25].

B.7 Biodiversity considerations in the planning process

Administrative and policy guidance on the application of some of these statutory obligations is provided in relevant government policy guidance and advice (see Column 4, Table B.1).

Table B.1 **UK nature conservation legislation, and relevant policy guidance and advice**

Country	Relevant statutory regulations	Primary legislation	Planning guidance and statements
England	Conservation of Habitat and Species Regulations 2010, as amended [7]	Wildlife and Countryside Act 1981, as amended [1] Protection of Badgers Act 1992 [24] Countryside and Rights of Way Act 2000 [57] Natural Environment and Rural Communities Act 2006 [6]	National Planning Policy Framework 2012 [41] Circular 06/2005: *Biodiversity and geological conservation – Statutory obligations and their impact within the planning system* [47] Circular 2/99: *Environmental Impact Assessment* 1999 [58]
Wales	Conservation of habitat and species Regulations 2010, as amended [7]	Wildlife and Countryside Act 1981, as amended [1] Protection of Badgers Act 1992 [24] Countryside and Rights of Way Act 2000 [57] Natural Environment and Rural Communities Act 2006 [6]	Planning Policy Wales 2012 [59] Technical Advice Note TAN 5 Nature Conservation and Planning 2009 [40]
Scotland	Conservation (Natural Habitats &c.) Regulations 1994, as amended [8] [A)]	Wildlife and Countryside Act 1981, as amended [1]. Part 1 for statutory protection of species. [B)] Protection of Badgers Act 1992 [24], as amended by: Nature Conservation (Scotland) Act 2004 [25]; and Wildlife and Natural Environment (Scotland) Act 2011 [26] Local Government (Scotland) Act 2003 [60]	Scottish Planning Policy 2010 [48] Planning Advice Note (PAN) 60 *Planning for Natural Heritage* 2000 [49] Circular 6/1995 *Nature Conservation: Implementation in Scotland of EC Directives on the Conservation of Natural Habitats and of Wild Flora and Fauna, and the Conservation of Wild Birds: The Conservation (Natural Habitats, etc.) Regulations 1994* [61] *European Protected Species, Development Sites and the Planning System: Interim guidance for local authorities on licensing arrangements* [62]

Table B.1 **UK nature conservation legislation, and relevant policy guidance and advice**

Country	Relevant statutory regulations	Primary legislation	Planning guidance and statements
Northern Ireland	Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995, as amended [9]	Wildlife (Northern Ireland) Order 1985, as amended [2] Wildlife and Natural Environment (Northern Ireland) Act 2011 [15] Nature Conservation and Amenity Lands (Northern Ireland) Order 1985, as amended [3] Environment (Northern Ireland) Order 2002, as amended [14]	Planning Policy Statement 2: *Natural Heritage* 2013 [50] Planning Policy Statement 18: *Renewable Energy* 2009 [63]

[A)] The various amendments to these regulations in Scotland mean that they do not mirror those in England and Wales. See the SNH website on the legal framework for protected species and protected areas: http://www.snh.gov.uk/protecting-scotlands-nature/protected-species/legal-framework/ and http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/international-designations/

[B)] The provisions of this part of the Act differ in Scotland from those in England and Wales.

Annex C (informative) Professional codes of conduct

The following is a summary of the professional conduct expected of their members by various professional bodies with regard to protection of the natural environment.

Chartered Institute of Building (CIOB)

Rules and regulations of professional competence and conduct (2008) [64]

Rule 5.4: "*ensure, when undertaking any other construction related activity, that all such work is in accordance with good practice and current standards and complies with all statutory and contractual requirements.*"

Chartered Institute of Ecology and Environmental Management (CIEEM)

Code of Professional Conduct (2013) [65]

Chartered Institute of Water and Environmental Management (CIWEM)

Code of Ethics (2010) [66]

"Members of the Institution will be expected to use their influence to the fullest extent and to behave to the best of their ability to maintain a sustainable environment".

Institute of Chartered Foresters

Code of Professional Ethics [67]

Section 28B(4) states:

"Every member shall practise his or her profession with due regard to sound ecological, social, economic and environmental principles to the advantage of present and future generations."

Institute of Environmental Management and Assessment (IEMA)

Code of Practice (2008) [68]

Paragraph 3: *"Support and promote sustainable action and challenge environmentally unsustainable action."*

Paragraph 4: *"Work to, and promote, high standards and best practice in the environmental profession."*

Institute of Environmental Sciences (IES)

Code of Professional Conduct [69]

Rule No 2: *"(Members shall) have full regard for the enhancement of environmental quality and sustainable development and the mitigation of environmental harm."*

Institution of Civil Engineers ICE

Code of Professional Conduct (2008) [70]

Rule No 4: "*All members shall show due regard for the environment and for the sustainable management of natural resources.*"

Landscape Institute (LI)

Code of Conduct (2012) [71]

Royal Academy of Engineering (RAE)

Statement of Ethical Principles (2011) [72], Respect for Life, Law and the Public Good

"Professional Engineers should give due weight to all relevant law, facts and published guidance, and the wider public interest. They should: ensure that all work is lawful and justified; minimise and justify any adverse effect on society or on the natural environment for their own and succeeding generations; take due account of the limited availability of natural and human resources".

Royal Institute of British Architects (RIBA)

Code of Professional Conduct (2005) [73]

Principle 3.2 "*Members should be aware of the environmental impact of their work."*

Royal Institute of Chartered Surveyors (RICS)

Professional Ethics Guidance Note: Part 1 (2000) [74]

"*You must make every effort to avoid pollution and damage to the environment through your own actions and the advice you give. You are looked to for setting an example of high environmentally sensitive standards."*

Royal Town Planning Institute (RTPI)

Code of Professional Conduct (2012) [75]

"*Members of the RTPI shall act with competence, honesty and integrity"* and *"shall fearlessly and impartially exercise their independent professional judgement to the best of their skill and understanding."*

Annex D (informative) Standard or model planning conditions and planning "informatives"

D.1 Overview

This annex provides a set of standard or model conditions that can be used in a range of situations where it is appropriate to secure:

- biodiversity methods statements (see **D.2**);
- restrictions and controls over development to protect biodiversity features (see **D.3**);
- large-scale ecological strategies, plans and schemes (see **D.4**);
- additional investigations, surveys and assessments after the grant of consent (see **D.5**); and
- non-licence measures in relation to European protected species matters (see **D.6**).

Each of the model conditions in this annex satisfies the six criteria set out in government policy [13)] and included in **9.1.4**. However, this set of conditions is not comprehensive and decision-makers have to ensure that any conditions used are, where necessary, adapted as appropriate to suit the particular circumstances of each case.

Many of the situations covered in biodiversity conditions also lie within the scope the landscape architect's appointment and therefore need to be coordinated with their proposals. The aim is to achieve greater integration of approach to overall scheme design and implementation, so that conditions dealing with biodiversity are prepared in conjunction with conditions dealing with landscape and urban design. This provides an opportunity for overlapping interests to be addressed (e.g. landscaping that can serve a biodiversity, as well as visual amenity purpose) and also helps ensure proposals are appropriate to the landscape setting and that long-term practical maintenance and health and safety issues are also fully integrated.

The conditions in this annex have been formulated so that they provide the necessary level of precision to enable all concerned with their implementation and enforcement to understand exactly what is required in order to achieve compliance.

NOTE Since 1992, local planning authorities have been able to ensure compliance with many planning conditions by serving a breach of condition notice. If a valid breach of condition notice is contravened, the resulting offence is open to summary prosecution. However, the prosecution's case has to be proved on the criminal standard of proof ("beyond reasonable doubt"). Consequently, if the breach of condition notice procedure is to operate effectively, planning conditions have to be formulated precisely. In the event of prosecution, the Magistrates' Court can then have no doubt about exactly what is required in order to comply with the terms of a planning condition. (Paragraph 6, Circular 11/95 [76]).

Model reasons to justify the imposition of the conditions set out in this annex cannot be given as the reasons for imposing conditions vary in each case according to circumstances. However, notes are provided with some of the model conditions that may be used to help formulate a reason when the specific circumstances of a condition are known.

[13)] For instance, for England, in paragraph 14 of Circular 11/95: *The use of planning conditions in planning permission* [76].

D.2 Biodiversity method statements

D.2.1 Condition

> No development shall take place (including any demolition, ground works, site clearance) until a method statement for [*… to be specified – see BS 42020:2013,* ***D.2.2*** *…*] has been submitted to and approved in writing by the local planning authority. The content of the method statement shall include the:
> a) purpose and objectives for the proposed works;
> b) detailed design(s) and/or working method(s) necessary to achieve stated objectives (including, where relevant, type and source of materials to be used);
> c) extent and location of proposed works shown on appropriate scale maps and plans;
> d) timetable for implementation, demonstrating that works are aligned with the proposed phasing of construction;
> e) persons responsible for implementing the works;
> f) initial aftercare and long-term maintenance (where relevant);
> g) disposal of any wastes arising from works.
> The works shall be carried out strictly in accordance with the approved details [… insert time limit where appropriate, e.g. first planting season after the approval of the method statement …] and shall be retained in that manner thereafter.

NOTE Such a condition can be used to secure detailed specification(s) for a wide range of biodiversity avoidance, mitigation, compensation and enhancement measures, such as are outlined in ***D.2.2****.*

Method statements might also be appropriate to secure specific biodiversity measures during construction and these may be further complemented and used in conjunction with other restrictions and controls over particular construction operations (see ***D.3****) where it is necessary to prevent adverse effects from occurring. However, in more complex cases where a suite of complimentary construction-related measures are required, it might be more appropriate to secure these through a construction environmental management plan (CEMP) as set out in* ***D.4.1****.*

D.2.2 Examples of works that may be undertaken via a biodiversity method statement

Method statements are suited to the delivery of a range of biodiversity conservation measures, including provision for:

a) activities relating to conservation good practice:
   1) creation of new wildlife features, e.g. bespoke bat roosts/caves/structures, erection of bird boxes in buildings/structures, otter holts, badger setts, barn owl boxes and ponds;
   2) creation, restoration and enhancement of semi-natural habitats;
   3) tree, hedgerow, shrub and wildflower planting/establishment;
   4) habitat removal and reinstatement/replacement;
   5) shaping new landforms associated with habitat creation, e.g. pond construction;
   6) bat crossings over or under new roads;

7) provision and control of access and environmental interpretation facilities, e.g. bird hides, paths, fences, bridges, stiles, gates and signs/information boards;

b) activities relating to construction:

1) species rescue and translocation, e.g. reptiles and amphibians;

2) roof stripping or the full or partial demolition of buildings;

3) habitat salvage and translocation, e.g. hedgerows;

4) temporary management of existing habitats during construction;

5) temporary shelters during construction for vulnerable species, e.g. barn owl boxes;

6) alternative routes required for otters to cross roads during any construction works restricting access to a stream;

7) soil handling, movement and management.

D.2.3 Where native species are required as part of the design

Where it is intended to create semi-natural habitats, all species used in the planting proposals [… *insert details of planting plans, etc.* …] shall be locally native species of local provenance unless otherwise agreed in writing with the local planning authority.

NOTE The purpose of using native stock is to conserve and enhance biodiversity by protecting the local floristic gene pool that has evolved within the local landscape, and to prevent the spread of non-native species and those of no local provenance.

D.3 Restrictions and controls

D.3.1 General

D.3.1.1 In some instances where harm can be avoided or reduced to reasonable levels, use of conditions controlling development can negate the need to apply for a European protected species licence. See **D.6** for use of conditions where a European protected species licence is required.

D.3.1.2 Restrictions and controls are suited to situations where it is necessary to avoid (or reduce to reasonable levels) the risk of harm to biodiversity, for example to impose:

a) restrictions on the removal of vegetation or earth moving within certain parts of the site;

b) restrictions on the timing or phasing of certain construction activities and operations;

c) restrictions on working areas through the erection of protective fencing and warning signs;

d) controls over the destruction, removal or alteration of features used by protected species;

e) control over specified construction activities to avoid causing disturbance to protected species;

f) controls over the design and operation of lighting (during construction and post development);

g) adequate on-site monitoring and availability of advice over construction activities during sensitive periods or activities;

h) restrictions on when the development can be occupied

i) restrictions to control the spread and/or removal of non-native invasive species;

j) restrictions to control the introduction of non-native species into areas where they do not previously occur.

D.3.2 Protection of breeding birds during construction

D.3.2.1 Condition

No removal of hedgerows, trees or shrubs [… *consider also brambles, ivy and other climbing plants if appropriate* …] [… *or works to or demolition of buildings or structures that may be used by breeding birds* …] shall take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

NOTE Such conditions are to be used to ensure that breeding birds are protected from harm during construction. All British birds, their nests and eggs (with certain limited exceptions) are protected by Section 1 of the Wildlife and Countryside Act 1981, as amended.

D.3.2.2 Informative on breeding birds in place of Condition D.3.2.1

The applicant is reminded that, under the Wildlife and Countryside Act 1981, as amended (section 1), it is an offence to remove, damage or destroy the nest of any wild bird while that nest is in use or being built. Planning consent for a development does not provide a defence against prosecution under this act.

Trees and scrub are likely to contain nesting birds between 1st March and 31st August inclusive. Trees and scrub are present on the application site and are to be assumed to contain nesting birds between the above dates, unless a recent survey has been undertaken by a competent ecologist to assess the nesting bird activity on site during this period and has shown it is absolutely certain that nesting birds are not present.

D.3.3 Protection of badgers on construction sites – Condition

No works which include the creation of trenches or culverts or the presence of pipes shall commence until measures to protect badgers from being trapped in open excavations and/or pipe and culverts are submitted to and approved in writing by the local planning authority. The measures may include:

a) creation of sloping escape ramps for badgers, which may be achieved by edge profiling of trenches/excavations or by using planks placed into them at the end of each working day; and

b) open pipework greater than 150 mm outside diameter being blanked off at the end of each working day.

NOTE This condition can be used to ensure that badgers are not trapped and harmed on site and also to ensure that badgers do not cause problems for future site operation, e.g. blockage of pipes.

D.3.4 Avoiding disturbance to bats during construction (seasonal) – Condition

Where ecological surveys have identified the presence of roosting bats, no activities that could result in disturbance (such as demolition, roof stripping, excavations or building works or associated operations) shall be carried out between the dates of 1st [month] and 1st [month] in any year. Any works undertaken during the specified periods should only be carried out under the direction of a licensed bat ecologist to ensure that an offence is not committed.

*NOTE This type of condition can be used to ensure that development does not occur when the bats are occupying a roost. For summer roosts this means when the bats are active during the spring to autumn. For hibernation roosts, this means when they are present through the late autumn, winter and early spring, as long at the roost is not damaged or destroyed. Works undertaken during the period when the bats are absent might enable works to proceed without an offence being committed and the need for an EPS licence (see BS 42020:2013, **D.6**). However, where a bat roost is going to be destroyed or damaged an EPS licence will in all cases be required.*

Use of such a condition requires that such species are likely to be present and likely to be affected.

D.3.5 Lighting design strategy for light-sensitive biodiversity – Condition

Prior to occupation, a "lighting design strategy for biodiversity" for [… *specify buildings, features or areas to be lit* …] shall be submitted to and approved in writing by the local planning authority. The strategy shall:

a) identify those areas/features on site that are particularly sensitive for [… *insert species*…] and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and
b) show how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places.

All external lighting shall be installed in accordance with the specifications and locations set out in the strategy, and these shall be maintained thereafter in accordance with the strategy. Under no circumstances should any other external lighting be installed without prior consent from the local planning authority.

NOTE Many species active at night (bats, badgers and otters) are sensitive to light pollution. The introduction of artificial light might mean such species are disturbed and/or discouraged from using their breeding and resting places, established flyways or foraging areas. Such disturbance can constitute an offence under relevant wildlife legislation.

Use of such a condition requires that such species are likely to be present and likely to be affected.

D.3.6 Control over lighting (hours of use) – Condition

The [… *building/site/play area/sport pitches, etc.* …] shall not be externally lit between the hours of [time] and [time], unless otherwise agreed in writing by the local planning authority.

NOTE Many species active at night (bats, badgers and otters) are sensitive to light pollution. The introduction of artificial light might mean such species are disturbed and/or discouraged from using their breeding and resting places, established flyways or foraging areas. Such disturbance can constitute an offence under relevant wildlife legislation.

Use of such a condition requires that such species are likely to be present and likely to be affected.

D.3.7 Restrictions on occupation of development until specific biodiversity outcomes are achieved – Condition

The development hereby permitted shall not be occupied until [… stipulate the essential matter, e.g. bat boxes, bird boxes, artificial otter holt or badger sett …] has been installed/constructed in accordance with details shown on submitted plan No. X.

D.3.8 Securing on-site ecological expertise during construction – Condition

No development shall commence until the role and responsibilities and operations to be overseen by an appropriately competent person [… *e.g. an ecological clerk of works … on-site ecologist* …] have been submitted to and approved in writing by the local planning authority. The appointed person shall undertake all activities, and works shall be carried out, in accordance with the approved details.

NOTE The purpose of securing ecological expertise on site during construction is to ensure adequate professional ecological expertise is available to assist those implementing the development to comply with statutory requirements, planning conditions and any relevant protected species licences.

*The activities and operations most likely to require on-site monitoring, advice and reporting are those that are covered by restrictions and controls and/or method statements, as set out in the Conditions in **D.2** and **D.3**.*

*The use of this condition is suited to smaller scale developments with limited operations or activities that are likely to affect biodiversity. For bigger, more complex schemes, the role and responsibilities of an ecological clerk of works may be best covered within a construction environmental management plan (CEMP). See Condition **D.4.1**.*

D.3.9 Protective measures during construction – Condition

> No development, demolition, earth moving shall take place or material or machinery brought onto the site until protective fencing and warning signs have been erected on site in accordance with the approved [… biodiversity mitigation statement, construction method statement or CEMP…]. All protective fencing and warning signs will be maintained during the construction period in accordance with the approved details.

NOTE Since irreparable damage can be done to biodiversity features on construction sites in a very short space of time, it is often necessary to ensure that features to be retained are adequately identified and physically protected from accidental damage by development operations, e.g. by earth-moving machinery.

D.3.10 Restrictions on operations involving invasive non-native species – Condition

> Prior to the commencement of development, an invasive non-native species protocol shall be submitted to and approved by the local planning authority, detailing the containment, control and removal of [… *insert species, e.g. Japanese Knotweed* …] on site. The measures shall be carried out strictly in accordance with the approved scheme.

NOTE It is an offence under the Wildlife and Countryside Act 1981, as amended, to introduce, plant or cause to grow wild any plant listed in Schedule 9, Part 2 of the Act. Japanese Knotweed [… insert other relevant species …] is included within this schedule. All Japanese Knotweet waste (the plant itself or material containing its rhizomes) is classed as a controlled/special waste and therefore needs to be disposed of in accordance with the Environmental Protection Act 1990 and the Environmental Protection Act Duty of Care Regulations 1991.

The submission of a method statement, to be agreed in writing with the local planning authority by condition, is to ensure that an adequate means of eradicating or containing the spread of the plant is considered and thereafter implemented to prevent further spread of the plant which would have a negative impact on biodiversity and existing or proposed landscape features.

Further information is available from the Non-native Species Secretariat (NNSS) web site at https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm and, in Scotland, at https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm

Further advice for the construction industry on legal responsibilities when dealing with Japanese knotweed, giant hogweed and other invasive plants is available on Netregs http://www.netregs.org.uk

D.3.11 Biosecurity protocol to minimize the risk of introducing non-native species into sensitive habitats, especially into marine and freshwaters – Condition

Prior to the commencement of development, a biosecurity protocol shall be submitted to and approved by the local planning authority detailing measures to minimize or remove the risk of introducing non-native species into a particular area during the construction, operational or decommissioning phases of a project. The measures shall be carried out strictly in accordance with the approved scheme.

NOTE The submission of a biosecurity protocol method statement, to be agreed in writing with the local planning authority by condition, is to ensure that an adequate means of preventing the introduction of non-native species is considered and thereafter implemented to prevent the spread of invasive non-native species which would have a negative impact on biodiversity and the functioning of ecosystems.

The risk of accidental introduction of non-native species has been highlighted as a particular risk for the water body degradation under the Water Framework Directive and for marine species under the objectives within the Marine Strategy Framework Directive.

In England and Wales, it is an offence under the Wildlife and Countryside Act 1981, as amended, to release or allow to escape into the wild any animal which is of a kind that is not ordinarily resident in and is not a regular visitor to Britain in a wild state or to plant or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9.

In Scotland it is an offence to release or allow to escape from captivity any animal to a place outwith its native range or to cause any animal outwith the control of any person to be at a place outwith its native range or to plant or otherwise cause to grow any plant in the wild outwith its native range.

Further information is available from the Non-native Species Secretariat (NNSS) web site at https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm

Further information applicable to offshore industries is available from the International Oil and Gas Producers association website at: http://www.ogp.org.uk/pubs/436.pdf

D.4 Conditions relating to construction and large-scale biodiversity strategies, plans and schemes

D.4.1 Construction environmental management plans (Biodiversity) – Condition

No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.

a) Risk assessment of potentially damaging construction activities.
b) Identification of "biodiversity protection zones".
c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
d) The location and timing of sensitive works to avoid harm to biodiversity features.
e) The times during construction when specialist ecologists need to be present on site to oversee works.
f) Responsible persons and lines of communication.
g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

*NOTE See BS 42020:2013, Clause **10**, for a comprehensive list of issues and activities that may be considered and included within a CEMP.*

D.4.2 Biodiversity monitoring strategy (and remedial measures) – Condition

No development shall take place, including demolition, ground works and vegetation clearance, until a biodiversity monitoring strategy has been submitted to, and approved in writing by, the local planning authority. The purpose of the strategy shall be to [… *insert purpose where this is clearly focused* [1] …]. The content of the Strategy shall include the following.

a) Aims and objectives of monitoring to match the stated purpose.
b) Identification of adequate baseline conditions prior to the start of development.
c) Appropriate success criteria, thresholds, triggers and targets against which the effectiveness of the various conservation measures being monitored can be judged.
d) Methods for data gathering and analysis.
e) Location of monitoring.
f) Timing and duration of monitoring.
g) Responsible persons and lines of communication.
h) Review, and where appropriate, publication of results and outcomes.

A report describing the results of monitoring shall be submitted to the local planning authority at intervals identified in the strategy. The report shall also set out (where the results from monitoring show that conservation aims and objectives are not being met) how contingencies and/or remedial action will be identified, agreed with the local planning authority, and then implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The monitoring strategy will be implemented in accordance with the approved details.

[1] For instance, to establish the effectiveness of new nesting and roost features in a barn conversion by monitoring their use (recording distribution and abundance) by locally occurring bird and bats species.

NOTE Monitoring is required to ensure that that the proposed development delivers the fully functioning biodiversity outcomes set out, firstly, in the planning application and then approved in the planning consent. Monitoring is also required to: a) determine whether any conservation actions have been ineffective, leading to failure (in full or part) to achieve stated conservation objectives, and b) identify contingencies and/or remedial measure required to ensure that biodiversity outcomes comply with the originally approved scheme.

D.4.3 Ecological design strategies (and ecological creation and restoration schemes, etc.) – Condition

No development shall take place until an ecological design strategy (EDS) addressing [… *mitigation … compensation … enhancement … restoration* …] has been submitted to and approved in writing by the local planning authority.
The EDS shall include the following.
a) Purpose and conservation objectives for the proposed works.
b) Review of site potential and constraints.
c) Detailed design(s) and/or working method(s) to achieve stated objectives.
d) Extent and location/area of proposed works on appropriate scale maps and plans.
e) Type and source of materials to be used where appropriate, e.g. native species of local provenance.
f) Timetable for implementation demonstrating that works are aligned with the proposed phasing of development.
g) Persons responsible for implementing the works.
h) Details of initial aftercare and long-term maintenance.
i) Details for monitoring and remedial measures.
j) Details for disposal of any wastes arising from works.
The EDS shall be implemented in accordance with the approved details and all features shall be retained in that manner thereafter.

D.4.4 Measures that may be addressed in ecological design strategies

The following list is not exhaustive, but is illustrative of the measures that may be incorporated into an ecological design strategy.

a) Retention and protection of existing habitats during construction.

b) Habitat removal and reinstatement.

c) Provision for wildlife corridors, linear features and habitat connectivity.

d) Woodland, tree, hedgerow, shrub, wetland and wildflower planting and establishment.

e) Proposed new landforms associated with habitat creation, e.g. water bodies and watercourses.

f) Soil handling, movement and management.

g) Creation, restoration and enhancement of semi-natural habitats.

h) Species rescue and translocation, e.g. reptiles and amphibians.

NOTE Where the European or nationally protected species are involved, it may be more appropriate to secure a method statement through a protected species licence rather than through a planning condition.

i) Opportunities to expose and retain geodiveristy features.

j) Habitat salvage and translocation, e.g. hedgerows.

k) Bat crossings for new roads.

l) Otter ledges under new bridge constructions and/or alternative routes for otters to cross roads during any construction works restricting access to a stream.

m) Creation of new wildlife features, e.g. bespoke bat roosts/caves/structures, bird nesting features within buildings and structures, artificial otter holts, badger setts, barn owl boxes and wildlife ponds.

n) Provision and control of access and environmental interpretation facilities, e.g. bird hides, paths, fences, bridges, stiles, gates and signs/information boards.

D.4.5 Landscape and ecological management plans (LEMPs) – Condition

(Also referred to as a Habitat or Biodiversity Management Plan)

A landscape and ecological management plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior [… *to the commencement or occupation* …] of the development [*or specified phase of development*]. The content of the LEMP shall include the following.

a) Description and evaluation of features to be managed.
b) Ecological trends and constraints on site that might influence management.
c) Aims and objectives of management.
d) Appropriate management options for achieving aims and objectives.
e) Prescriptions for management actions.
f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
g) Details of the body or organization responsible for implementation of the plan.
h) Ongoing monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery.

The plan shall also set out *(where the results from monitoring show that conservation aims and objectives of the LEMP are not being met)* how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme.

The approved plan will be implemented in accordance with the approved details.

NOTE To ensure that some form of covenant is in place to ensure that the management body that takes on long-term responsibility for implementation of the LEMP (management of the ecological areas) is to do so in strict accordance with the details contained therein.

D.4.6 Compliance with existing detailed biodiversity method statements, strategies, plans and schemes – Condition

> All ecological measures and/or works shall be carried out in accordance with the details contained in [… *specify relevant landscape/ecological document(s)* …] and […*dated* …] as already submitted with the planning application and agreed in principle with the local planning authority prior to determination.

NOTE Where detailed strategies, plans or schemes have already been prepared and submitted with the planning application prior to determination, its implementation may be secured with this condition.

D.5 Conditioning additional ecological investigations, surveys and assessments

D.5.1 Government advice

With reference to protected species surveys, government advice [14)] states that:

a) the presence or absence of protected species, and the extent to which they could be affected by the proposed development, should be established before planning permission is granted, since otherwise all material considerations might not have been considered in making the decision; and

b) use of planning conditions to secure ecological surveys after planning permission has been granted should only be applied in exceptional circumstances.

The following are conditions that may be used in some of the most commonly encountered situations where it might be appropriate to secure further surveys after planning consent has been granted.

[14)] In England: Circular 06/2005 [47], paragraphs 98 and 99; in Wales: TAN 5 2006 [40], paragraph 6.2.2; and in Northern Ireland: Planning Policy Statement 2 *Natural Heritage* [50], Policy NH 2.

D.5.2 Time limit on development before further surveys are required – Condition

> If the [… *development or a specified phase of development*…] hereby approved does not commence (or, having commenced, is suspended for more than 12 months) within X years from the date of the planning consent, the approved ecological measures secured through Condition X shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys commissioned to i) establish if there have been any changes in the presence and/or abundance of [… *insert relevant habitat and/or species* …] and ii) identify any likely new ecological impacts that might arise from any changes.
> Where the survey results indicate that changes have occurred that will result in ecological impacts not previously addressed in the approved scheme, the original approved ecological measures will be revised and new or amended measures, and a timetable for their implementation, will be submitted to and approved in writing by the local planning authority prior to the commencement of development [… *or specified phase of development* …]. Works will then be carried out in accordance with the proposed new approved ecological measures and timetable.

NOTE This condition can be used in situations where any delay in the commencement of development or a specified phased of development might mean that the original survey information, and subsequent impact assessment, is out of date and consequently any associated mitigation, etc., no longer relevant. This might particularly be an issue where there might have been changes in the distribution or abundance of mobile protected species on site.

IMPORTANT: If any protected species are identified in the new surveys that were not previously known to be on site, and are likely to be harmed by the development, then a protected species licence might be required before works can commence (see 9.3, 9.5 and D.6).

D.5.3 Further surveys for developments phased over a long period – Condition

> Where the approved development is to proceed in a series of phases over X years, further supplementary ecological surveys for [… *insert relevant habitat and/or species* …] shall be undertaken to inform the preparation and implementation of corresponding phases of ecological measures required through Condition(s) XX. The supplementary surveys shall be of an appropriate type for the above habitats and/or species and survey methods shall follow national good practice guidelines.

D.6 Planning conditions and European protected species

D.6.1 Using conditions to avoid an offence and therefore the need for a protected species licence

Planning conditions may be used to secure method statements (see **D.2**) and/or controls and restrictions (see **D.3**) in situations where protected species are present and where it can be demonstrated that construction can proceed without an offence being committed, if operations are subject to very specific measures capable of being controlled by the imposition of the condition.

Where harm cannot be avoided (e.g. damage or destruction of a bat roost) and/or the risk cannot be reduced to a reasonable level to avoid the risk of a criminal offence and prosecution, the applicant ought to apply for a protected species licence from the appropriate body (see **9.5**).

NOTE In Scotland, if there is any risk that an offence could occur, the activity requires a licence even if the risk is reduced to a "reasonable" level.

D.6.2 Submission of a copy of the EPS licence – Condition

Wherever possible, the local planning authority ought to identify very specifically the types and location of activities that are covered by this condition (e.g. demolition/site clearance/pneumatic drilling/removal or alteration to roofs or structures), because only certain activities in certain areas are liable to cause harm, and thereby likely to be in breach of the Regulations. Reference ought also therefore be made to an annexed plan, map or specification as necessary to define the specified activities clearly. This ensures that the condition is proportionate and will not unduly affect the schedule for a development.

> The following works […*state the specific works or activity likely to cause harm to particular protected species … and as identified in plan/drawing/specification X…*] shall not in any circumstances commence unless the local planning authority has been provided with either:
> a) a licence issued by [the relevant licensing body] pursuant to Regulation 53 of The Conservation of Habitats and Species Regulations 2010 authorizing the specified activity/development to go ahead; or
> b) a statement in writing from the relevant licensing body to the effect that it does not consider that the specified activity/development will require a licence.

*NOTE 1 In England, the use of planning conditions for this purpose has been established through case law and is also recommended in government planning advice (see Note 2 to BS 42020:2013, **9.3.3**).*

*NOTE 2 The Habitats Directive requires a system of "strict protection" for certain protected species (see Note 1 to BS 42020:2013, **9.3.3**).*

It is a criminal offence (subject to certain defences) to consciously harm European protected species without a licence, which would only be issued if the statutory licensing body is satisfied that the derogation criteria are met. However, the risk of criminal prosecution might not prevent harm from taking place, as only a small proportion of reported disturbances of protected species leads to conviction, and most incidents go unreported to the police. This condition therefore helps to ensure that a developer will apply for an EPS licence and, if they do not, can be prevented in advance from undertaking the activities that might jeopardize the protected species, before the species is harmed. The condition can be enforced by a temporary stop notice or by injunction.

Annex E (informative) Other consent regimes

Table E.1 **Other consent regimes that might interact with biodiversity conservation**

Consent	Works requiring approval	Enforcement agency			
		England	**Wales**	**Scotland**	**Northern Ireland**
Disturbance or translocation of protected species or their resting breeding sites	Where a protected species has been identified, a licence might be necessary to undertake mitigation or works in the area.	DEFRA Natural England	Welsh Government CCW	Scottish Government SNH	NIEA NH
Permit to discharge water to a watercourse	Effluent discharges of 5 m^3 to 20 m^3 per day to a point source, i.e. pipe, outfall or soak-away, that enters directly or indirectly controlled waters. Bespoke permit needed for any discharges exceeding 20 m^3 per day.	EA	NRC	SEPA	NIEA WMU
Consent to discharge waste water to a sewer	Consent or approval for discharge of effluent to sewer.	Water Company	Water Company	Water Company	NIEA WMU
S165 consent	Temporary consent to discharge to surface water from a pipe:				
	• less than 229 mm (9″) or when the EA request a formal application;	EA	NRC	SEPA	NIEA WMU
	• greater than 229 mm (9″) or when the EA request a formal application.	EA	NRC	SEPA	NIEA WMU
Abstraction licence	Abstraction of water from a controlled water resource.	EA	NRC	SEPA	NIEA WMU
Notification of removal of water from excavations	Removal of water from the ground or surface water to assist construction or the extraction of aggregates and minerals.	EA	NRC	SEPA	NIEA WMU
Works in proximity of a watercourse/land drainage/flood defence consent	Any temporary or permanent physical works in, adjacent to (within 9 m), under or over a watercourse.	LLFA/EA	LA/NRC	SEPA	NIEA/RA
Consent to use pesticide in close proximity to a watercourse	Any application of a pesticide (including herbicides, fungicides, insecticides, molluscicides, rodenticides, growth regulators and masonry and timber preservatives) within 10 m of a watercourse, including canal, ditch, river and estuary.	EA	NRC	SEPA	NIEA WMU/ DARD

Table E.1 **Other consent regimes that might interact with biodiversity conservation**

Consent	Works requiring approval	Enforcement agency			
		England	Wales	Scotland	Northern Ireland
Consent to affect bed of an estuary or sea	Any works that might deposit material onto the bed of an estuary or the sea, including cofferdams, erection of jetties, outfall structures. (FEPA [77] consent; in Wales a Coast Protection Act consent (CPA) [78] is also needed.)	MMO	MCU, Welsh Government	Marine Scotland Licensing Operations Team, Scottish Government	DoE Marine Division
River works licence (within River Thames)	A river works licence is required under section 66 of the Port of London Act 1968, as amended [79], for any works in the River Thames, riverward of the mean high water mark and regardless of ownership of the river bed, including any works under the river or overhanging the river.	Port of London Authority	—	—	—
Dredging licence (within River Thames)	Before any dredging work is undertaken on the tidal Thames a licence for such works has to be obtained under section 73 of the Port of London Act 1968, as amended [79].	Port of London Authority	—	—	—
River works licence (within the Medway Port)	Any works to be carried out within the port limit require a river works licence to ensure that all relevant consultations have been carried out and that there are no adverse effects on the safety of navigation within the port.	Peel Ports Medway	—	—	—
Dredging licence (within the Medway Port)	Before any dredging work is undertaken a licence has to be obtained.	Peel Ports Medway	—	—	—
Discharge of hazardous substances and non-hazardous pollutants	Disposal/discharge of effluent containing hazardous substances or non-hazardous pollutants to ground or to surface water which is not covered by a Consent to Discharge	EA	NRC	SEPA	NIEA
Groundwater source protection zone (GSPZ)	Work being carried out within a GSPZ needs to be discussed with the local regulator.	EA	NRC	SEPA	NIEA

Table E.1 **Other consent regimes that might interact with biodiversity conservation**

Consent	Works requiring approval	Enforcement agency			
		England	Wales	Scotland	Northern Ireland
Water protection zones (WPZ) consent	General construction works are exempt, but any fixed premises, e.g. depots in a WPZ where chemicals are stored, require a consent. Consent required for the storage or use of: • 200 L of more of any controlled substance; • 50 L or more of any controlled substance in a single container.	EA	NRC	NA	NIEA
Piling work within a GWPZ approval	Approval has to be obtained for any piling or penetrative foundation works within a GWPZ. A piling risk assessment has to be undertaken, including contaminated land tests.	EA	NRC	SEPA	NIEA
Prescribed processes	Use of mobile concrete crushers and screens require a licence from the Planning Authority.	Planning Authority	Planning Authority	SEPA/ Planning Authority	NIEA/DOE Planning NI
S61 consent (noise and vibration)	Necessary only if a planning or development order or the client requires the contractor to enter into the S61 process.	Planning Authority	Planning Authority	Planning Authority	DOE Planning NI
Environmental Permitting (England and Wales) Regulations 2007 [80] Waste Management Licensing (Scotland) Regulations 2011 [81] Waste Management Regulations (Northern Ireland) 2006, as amended [82]	An environmental permit has to be gained for a location where waste material requires disposal, storage or treatment on site or where the off-site location does not have permitted licences. The Environmental Permitting Regulations [80] do not apply in Scotland, so a waste management licence has to be obtained.	EA	NRC	SEPA (WML)	NIEA
Control/Removal of invasive species	Submission of invasive species management plan or biosecurity plan to EA/SEPA/NIEA.	EA	NRC	SEPA	NIEA NH

Table E.1 **Other consent regimes that might interact with biodiversity conservation**

Consent	Works requiring approval	Enforcement agency			
		England	**Wales**	**Scotland**	**Northern Ireland**
Consent to work in a Site of Special Scientific Interest, Special Area of Conservation, Special Protection Area, Ramsar (wetland area)	Where works are to be undertaken in a protected habitat.	Natural England	CCW	SNH or Regulatory Authority	NIEA NH
Consent to work in a Site of Special Scientific Interest that is also a Special Area of Conservation, Special Protection Areas or Ramsar	Where works are to take place in or could affect the integrity of the protected site/or its species then an appropriate assessment might be required.	LPA/DEFRA Natural England	LPA/DEFRA CCW	LPA/DEFRA SNH	NIEA NH
Felling licence	Where more than 5 m^3 of timber is to be felled per quarter and no detailed planning permission is in place.	Forestry Commission	Forestry Commission	Forestry Commission	Forestry Service NI
Listed Building Consent/ Conservation Area Consent	Works affecting a listed building/conservation areas, including installation of noise insulation and remedial works on structure(s).	Planning Authority English Heritage	Planning Authority Welsh Government	Planning Authority Scottish Government	NIEA BH
Scheduled Ancient Monuments	Works potentially affecting a scheduled ancient monument have to be consented.	English Heritage	Welsh Government	Historic Scotland	NIEA BH
Works affecting an area of archaeological importance	Where works affect an area where there is evidence and/or potential for archaeological remains.	Planning Authority	Planning Authority	Planning Authority	NIEA BH
Port Authority consultation	Port authorities can impose certain controls and require certain agreements to be in place and implemented prior to and during the works.	Port Authority	Port Authority	Port Authority	Port Authority

Table E.1 **Other consent regimes that might interact with biodiversity conservation**

Consent	Works requiring approval	Enforcement agency			
		England	Wales	Scotland	Northern Ireland
Closure and diversion of public rights of way and roads	Temporary/permanent closures or diversions of public rights of way and roads require consent and notification of alterations prior to works commencing.	Planning Authority	Planning Authority	Planning Authority	DOE NI/ Local Council
Closure and diversion of trunk roads of motorways	Temporary/permanent closures or diversions of trunk roads and motorways require consent and notification of alterations prior to works commencing.	Highways Agency	Welsh Government	Scottish Government	Roads Service NI

KEY: BH (Built Heritage), DARD (Department of Agriculture and Rural Development), CCW (Countryside Council for Wales), LLFA (lead local flood authority), MCU (Marine Consents Unit), MMO (Marine Management Organisation), NH (Natural Heritage), WMU (Water Management Unit).

Annex F (informative) Biodiversity and the Construction (Design and Management) Regulations 2007 [32]

Ecologists and any contractors working for ecologists need to be aware that they might, in the course of their work, have responsibilities under the CDM Regulations [32]. The CDM Regulations place legal duties on virtually everyone involved in construction work, both commercial and domestic. The responsibilities of ecologists are given in the Health and Safety Executive Approved Code of Practice (ACoP) L144 [53].

The CDM Regulations [32] are mostly likely to apply to an ecologist where their work involves a design element or providing specifications, or where they could be advising on or directing the activities of a construction contractor. It is important to note that the responsibilities set out within the CDM Regulations [32] can apply during all stages of a project and for all projects, not just notifiable projects (which involve work lasting longer than thirty days and require the appointment of a CDM coordinator).

For example, where an ecologist designs a great crested newt pond, this could have safety implications for those responsible for its construction and maintenance. If someone provides designs for, or influences, decisions relating to construction work then they are considered to have design duties and responsibilities under the CDM Regulations [32]. This includes people who prepare drawings, design details, specifications, etc., that can be presented on paper, electronically or verbally. The duties of a designer are defined within the Regulations. An ecologist, working as part of a multidisciplinary team, ought not take overall responsibility for the design of any engineered structure, such as a pond, although they may input into the design by, for example, suggesting suitable depths, type of planting to be supplied. Other examples include green roof design, sustainable urban drainage systems (SuDS) design, new bat roost provision in buildings and erection of bat boxes.

Occasionally, an ecologist might have to work alongside contractors, such as when undertaking the role of ecological clerk of works or overseeing work carried out under a European protected species licence. This could involve the provision of advice to contractors carrying out construction-related work (including demolition work). The role of the ecologist, as part of the project team involved in the construction and maintenance of a proposed development, ought to be agreed in writing with the client before work begins. It is rare for an ecologist to be appointed as a contract administrator by a client.

If an ecologist believes that a contractor ought to take a particular course of action, they need to inform the client, who can then agree to the course of action and communicate that agreement with the contractor. A written note of any verbal instruction needs to be prepared, saved and circulated to all parties at the earliest opportunity. Under such circumstances the ecologist needs to clearly understand their responsibilities under the CDM Regulations [32].

Ecologists need to familiarize themselves with the CDM Regulations [32] and ACoP L144 [53] to ensure that they are competent to prepare or undertake a particular design. It is important to recognize that other members of the project team (e.g. landscape architects) can provide useful expertise on such matters (e.g. design input and contract administration) and effective interdisciplinary working is strongly recommended wherever possible (see **4.1**).

Annex G (informative) Construction-type activities with the potential to adversely affect biodiversity

The following activities could impact on biodiversity on and/or off site, and ought therefore to be reviewed as part of the risk assessment of potentially damaging construction activities.

a) Site clearance:
   - removal or pruning/cutting of trees, shrubs and ground vegetation (e.g. during bird breeding season);
   - removal of soil, rubble and other materials;
   - demolition of buildings and structures; and
   - removal of rubble and other materials.

b) Site set-up:
   - location of site offices, site huts, temporary latrines (including their drainage);
   - temporary storage areas and stockpiles for soils, materials, spoils and waste;
   - site lighting;
   - areas for plant maintenance and for storage of oils, fuels and chemicals;
   - establishment of haul roads (e.g. construction of rubble or concrete temporary roads); and
   - site fencing (e.g. disruption/severance of animal runs and paths).

c) Groundworks:
   - ground investigations, foundations, excavations and piling, temporary earthworks, tunnelling (including the necessary space to operate cranes and large machinery);
   - installation of underground services (e.g. pipes, electricity, gas, telecommunications cables, foul and surface water drains); and
   - temporary diversion of watercourse, and/or water abstraction and/or dewatering from and/or discharge to a receiving water body.

d) Assembly areas for components of construction:
   - assembly areas for dry trades (e.g. steel works and reinforcements); and
   - assembly areas for wet trades (e.g. concrete pours and batching).

e) Marine works:
   - piling or other works relating to foundations.

f) Construction:
   - night time working;
   - dust and noise; and
   - increase in traffic movements (deliveries, materials, etc.).

g) Environmental incidents:
   - vandalism;
   - fires and burning of wastes;
   - pollution (air, water and ground);
   - erosion and sediment run-off; and
   - accidents (e.g. fuel leaks and spills).

h) Disposal of wastes, removal of site offices and final site clearance after construction.

Annex H (informative) Ecological surveys and reporting

H.1 Survey information

To ensure that substantive evidence on the biodiversity potentially affected by a development proposal is made available to the decision-maker, ecological survey information submitted with the application may include:

a) an non-technical summary of main findings (see **6.5**);

b) introduction, including:

   1) description of the proposed development and details of the client;

   2) brief summary of statutory provisions for biodiversity conservation relevant to the features identified in the survey (with substantial details included in an appendix); and

   3) scale plan or map and 6 or 8 figure grid reference;

c) purpose and objectives of preliminary ecological appraisal or detailed full-scale surveys;

d) qualifications and experience/competence/accreditation of surveyor(s) (see Section 1);

e) date(s) when survey(s) were carried out and when the survey report was prepared;

f) exact areas of land and buildings covered by the surveys (e.g. shown on plan);

g) results of desk-top data trawl, e.g. information sought and obtained from local records centre and other relevant local nature conservation organizations and analysis and application of these data to survey and assessment;

h) conclusions of preliminary ecological appraisals (sometimes called walkover surveys);

i) field survey methods (see **6.3.4** and **6.3.5**) based on published good practice guidelines (see Bibliography);

j) survey results, including text, tables, photos, maps, illustrations, plans (with raw data appended where appropriate or available on request);

k) details of habitat, species and features present (including non-native invasive species), showing current condition, distribution and abundance;

l) analysis and interpretation of results (see **6.6**);

m) identification of limitations on the survey and how these affect the survey results (see **6.7**); and

n) identification of any further survey work needed to provide all of the information required to describe adequately the biodiversity characteristics of a site or area.

NOTE 1 Desk-top data trawls may include access to information provided by local record centres (LRCs), the National Biodiversity Network, local wildlife trusts and other specialist naturalist groups (e.g. local bat and mammal groups, etc.).

*NOTE 2 In relation to item n), under normal circumstances all surveys need to be complete prior to determination, and preferably by the time the application is registered. However, there are occasionally situations where further surveys are recommended (see **6.4.5**).*

H.2 Reporting effects on biodiversity and recommendations for mitigation, etc.

To ensure that adequate information (see **6.2** and **8.1**) about biodiversity impacts and proposals for avoidance, mitigation, compensation and enhancement is made available to the decision-maker, ecological reports may provide the following.

a) A non-technical summary of main findings.

b) A description of the baseline conditions, including full details from the ecological survey or desk-top study information (see **6.4** and **H.1**).

NOTE The detailed technical survey information can be appended or provided in a separate report.

c) Qualifications and experience/competence/accreditation of those preparing the report (see Section 1).

d) A description of the proposed scheme, with sufficient detail to allow ecological effects to be interpreted.

e) A full assessment of all likely ecological impacts (both positive and negative), with clear evidence to substantiate and justify the findings (see **8.4**).

f) Recommendations and details for all avoidance, mitigation, compensation and enhancement measures.

g) Demonstration of compliance with, or deviation from, relevant development plan policies and statutory obligations.

h) Post-development site safeguards:

1) long-term habitat/site management and maintenance where necessary (see **11.1**); and

2) habitat and species monitoring (see **11.2**).

i) Identification of mechanisms for securing commitment and delivery:

1) outline of measures to be secured through planning conditions/obligations (see **9.3** and **9.4**);

2) identification of any measures requiring protected species licences (see **9.5** and Annex E); and

3) identification of any measures requiring other consents (see **9.5** and Annex E).

j) Timetable of proposed works (see **10.6**), making clear:

1) any biodiversity measures that are time-critical, e.g. the need for such work to be undertaken at a particular time of year and/or in advance of a specific stage or phase of development;

2) that all biodiversity measures are compatible and in alignment with each other, e.g. timing of vegetation clearance; and

3) that all necessary biodiversity measures are compatible and in alignment with proposed construction-type operations, e.g. bird breeding season taken account of during ground vegetation clearance operations.

Where relevant, a) to j) ought to be made clear through the use of appropriate maps, plans, drawings, tables, photographs and summary forms, etc.

Annex I (informative)

Useful websites

Amphibian and Reptile Groups http://www.arguk.org/	Cranfield University http://www.cranfield.ac.uk/
Association of Local Environmental Records Centres (ALERC) http://www.alerc.org.uk/ (list of local records centres given at: http://www.alerc.org.uk/find-an-lrc.html)	Department of Environment and Rural Affairs (Defra) http://www.defra.gov.uk/
Association of Local Government Ecologists (ALGE) http://www.alge.org.uk/	Department of Environment Northern Ireland (DOENI) http://www.doeni.gov.uk/
Association of Wildlife Trust Consultancies (AWTC) http://www.awtc.co.uk/	Energy UK http://www.energy-uk.org.uk/
Bat Conservation Trust (BCT) http://www.bats.org.uk/	Environment Agency (EA) http://www.environment-agency.gov.uk/
Buglife http://www.buglife.org.uk/	Forestry Commission http://www.forestry.gov.uk/
Business and Biodiversity Offsets Programme http://www.business-biodiversity.eu/default.asp?Menue=133&News=43	Institute of Chartered Foresters http://www.charteredforesters.org/
Chartered Institute of Building http://www.ciob.org.uk/	Institute of Civil Engineers (ICE) www.ice.org.uk
Chartered Institute of Ecology and Environmental Management (CIEEM) http://www.cieem.net/	Institute of Environmental Management and Assessment (IEMA) http://www.iema.net/
Chartered Institution of Water and Environmental Management (CIWEM) http://www.ciwem.org/	Institute of Environmental Sciences (IES) http://www.ies-uk.org.uk/
Civil Engineering Contractors' Association (CECA) http://www.ceca.co.uk/	Landscape Institute http://landscapeinstitute.org/
Communities and Local Government (CLG) http://www.communities.gov.uk/corporate/	MAGIC http://magic.defra.gov.uk/
Confederation of Forest Industries (CONFOR) http://www.confor.org.uk/Default.aspx?pid=1	National Biodiversity Network (NBS) http://www.nbn.org.uk/
Countryside Council for Wales (CCW) http://www.ccw.gov.uk/Splash.aspx	Natural England (NE) http://www.naturalengland.org.uk/

Nature on the Map http://www.natureonthemap.naturalengland.org.uk/	Scottish Environment Protection Agency (SEPA) http://sepa.org.uk/
Northern Ireland Environment Agency http://www.doeni.gov.uk/niea/	Scottish Government http://home.scotland.gov.uk/home
Planning Officers Society (POS) http://www.planningofficers.org.uk/	Scottish Natural Heritage (SNH) http://www.snh.gov.uk/
Royal Institute of British Architects (RIBA) http://www.architecture.com/	Society for Biology http://www.societyofbiology.org/home
Royal Institute of Chartered Surveyors (RICS) http://www.rics.org/uk/	Society for the Environment http://www.socenv.org.uk/
Royal Society for the Protection of Birds (RSPB) http://www.rspb.org.uk/	The Wildlife Trusts http://www.wildlifetrusts.org/
Royal Town Planning Institute (RTPI) http://www.rtpi.org.uk/	Welsh Government http://wales.gov.uk/?lang=en

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BS EN ISO 14001, *Environmental management systems – Requirements with guidance for use*

PAS 2010, *Planning to halt the loss of biodiversity: biodiversity conservation standards for planning in the United Kingdom – Code of Practice*

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