Natural England Commissioned Report NECR206

Temporary effects: How the longevity of effects has been considered in respect of plans and projects affecting European sites - a review of authoritative decisions

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NATURAL ENGLAND

Foreword

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

The implementation of a wide range of plans or projects can affect species or habitats on sites which have been designated for their nature conservation importance as European Protected Areas.

The longevity or duration of impacts to European Protected Area interest features (species or habitats) is an important consideration when determining any adverse effect on integrity and whether the effects are significant in light of the conservation objectives for the site.

This report aims to provide an analysis of authoritative decisions that have considered longevity of effects of plans or projects being assessed under the Habitats Directive and Regulations. It will be used as a referencing tool for Natural England and other decision makers, in particular Natural England advisers involved in casework.

This report should be cited as:

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Further information
This report can be downloaded from the Natural England website: **www.gov.uk/government/organisations/natural-england**. For information on Natural England publications contact the Natural England Enquiry Service on 0845 600 3078 or e-mail **enquiries@naturalengland.org.uk**.

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Summary

Introduction

This report is concerned with how the longevity (duration) of effects upon European sites has been considered in authoritative decisions. It is intended to provide a referencing tool for Natural England and others involved in the Habitats Regulations Assessment process.

An 'authoritative decision' is a decision which has been subject to sufficient scrutiny, at an appropriate level, to impart a degree of *authority*. In the context of this report, 'authoritative decisions' are limited to those of the European and domestic (UK wide) court judgments and rulings, decisions by a Secretary of State, the Scottish or Welsh Ministers, and certain Planning Inspector decisions in respect of a proposed plan or project, and certain legally enforceable management measures such as a bye-law or statutory order. Also included are Article 6(4) 'opinions' from the European Commission.

It may be necessary to consider the date of a decision or the extent to which a particular case is consistent with previous judgments or practice before relying upon it in a decision-making process. It is the responsibility of the reader to interpret and apply the findings in this report appropriately. The findings and conclusions of the report should be considered fairly, as a whole, and not quoted, used or applied selectively, in order to support a pre-determined or preferred conclusion.

The longevity of an effect is an important consideration in decision making under the Habitats Regulations. This is because it is closely related to the specific legal tests against which a proposed plan or project needs to be assessed especially in stage 1, the 'screening' test and stage 2 the 'appropriate assessment' and 'integrity test'.

Methodology

The researchers compiled a list of potentially relevant cases drawn from:

i. their own library of decisions, and their empirical knowledge of case work;
ii. a further web-based search of European Court judgments and opinions;
iii. a web-based search for decisions relating to nationally significant infrastructure projects and projects consented under the Electricity and Pipeline Acts in England and Wales and their territorial and UK offshore waters; and
iv. suggestions made by officers in Natural England following an e-mail enquiry of case officers by the research project manager.

Over 180 cases were originally identified as being relevant to the assessment of plans and projects affecting European sites. Following an initial screening exercise, and a detailed analysis, eight cases are examined in this report as being relevant to the consideration of longevity of effects.

Discussion and conclusions

With only eight relevant cases, several of which had limited information about timescales of construction effects; and a general lack of quantitative data or specificity about recovery timescales, a degree of caution should be applied in drawing conclusions. Each case has to be considered on its merits and in light of the characteristics and specific environmental conditions at the site. However, taking the cases as a whole, the following conclusions can be reasonably drawn from the case studies.

An effect which can be regarded as ‘transient’ or ‘strictly temporary’, and which is capable of being fully undone, or made good, would be unlikely to represent an adverse effect on the integrity of a European site.

With the exception of plans or projects which have ‘no appreciable effect’, and taking account of the scale of the effect and the ecological function or value of the area affected, a ‘lasting’ effect which might result in either:

a. the permanent destruction of part of a qualifying habitat; or
b. the ‘long term deterioration’ of a qualifying feature.

Would be likely to be regarded as an adverse effect upon the integrity of the site.

With the exception of effects which can be regarded as ‘insignificant’ and taking account of the ecological function or value of the area affected, decisions relating to the longevity of an effect are generally influenced by the following factors:

- Whether an effect is ‘capable of being fully undone’ or ‘made good’;
- Whether the spatial scale of an effect is regarded as ‘acceptable’ in the short term;
- Whether mitigation measures which are an integral part of the project provide sufficient confidence that the affected area(s) will return to a comparable level of ecological functionality.

A Background to this research

A.1 Status of this report

This report sits within a series reviewing the findings of "authoritative decisions" which involved Habitats Regulations Assessment. It is concerned with how the longevity (duration) of effects of projects affecting European sites, has been considered in decision making. At the time of writing, two other reports are available regarding "small scale effects" and "functional linkages".

A.2 Who the report is for

The research was commissioned by Natural England "*for the production of a report which can act as a referencing tool for use by Natural England to inform a review of its approach to casework in light of recent interpretations of the Habitats Directive and Regulations"*. Whilst the report has primarily been drafted for Natural England, it will be of interest to all practitioners and advisers working in the assessment of plans and projects under the 'Habitats Regulations'[1].

A.3 Aims of this report

Natural England advisers in casework frequently issue advice on the potential effects that proposed plans or projects might have on European sites. For the purpose of this report the term 'European site' includes:

- Special Protection Areas (SPAs) classified under the EU Birds Directive[2];
- Special Areas of Conservation (SACs) designated under the EU Habitats Directive[3];
- Ramsar Sites listed under the Ramsar Convention[4].

Cases involving proposed SPAs or SACs could also be relevant because of European Court rulings as to how member states should secure the protection of such sites before they are fully designated or classified. Later in this report there are references to 'Sites of Community Importance' or 'SCI', because this is a term widely used in respect of European sites by the European Court and the European Commission.

Advice is given by Natural England based on the best available information in light of the characteristics and specific environmental conditions at the site concerned[5]. However, it can be difficult to ascertain what is acceptable under the specific tests set out in the assessment provisions of the Habitats Regulations (regulation 61), commonly referred to as a 'Habitats Regulations Assessment' or 'HRA'.

[1] The Conservation of Habitats and Species Regulations 2010 SI 490
[2] Council Directive of 30th November 2009 on the conservation of wild birds (2009/147/EC)
[3] Council Directive of 21/5/92 on the conservation of natural habitats and of wild fauna and flora (92/43/EEC)
[4] Convention on wetlands of international importance especially as waterfowl habitat, Ramsar, Iran 2/2/71 as amended by the Paris protocol 3/12/92 and the Regina amendments 3/6/87.
[5] Refer paragraph 48 Case C-127/02 *Waddenzee*

This report aims to provide an analysis of authoritative decisions which considered the longevity (or duration) of effects on European sites which can serve as a source of reference for advisers and decision makers.

A.4 The importance of case law to the decision making process

Case law is a vital source of information regarding how legislation should be correctly interpreted and applied. The Habitats Regulations transpose the requirements of the EU Wild Birds Directive and the EU Habitats Directive into domestic legislation. They set out a suite of legal obligations and responsibilities for a broad range of statutory agencies and decision making bodies (known as 'competent authorities'). As with all statutory instruments of this nature, there is scope for inconsistency in how the statutory provisions are interpreted and applied.

Too strict an interpretation might lead to plans or projects being delayed, subject to unnecessary restrictions, or ultimately refused under circumstances which were not intended to be incompatible with the underlying Directives. This can result in increased costs to, and frustration for, project proposers, which might have been avoidable, or unnecessary impediments to economic growth and development.

Too lenient an interpretation carries different risks. Plans or projects might go ahead without sufficient consideration of the potential harm to the sensitive habitats and species for which the sites have been designated. This in turn might lead to the deterioration of protected habitats and species, or a legal challenge through either the domestic or the European Courts regarding a failure to comply with the Regulations or the Directives.

Case law is therefore important in establishing a common understanding of how the tests involved in the assessment of plans and projects under the Habitats Regulations should be applied. There are credibility risks for decision makers, and those advising them, if a decision taken in respect of one proposed plan or project is not taken on the same basis as another plan or project, whether by the same or different competent authorities. Decision makers should strive to be consistent to ensure that the effects on the habitats and species protected under the Habitats Regulations are weighed appropriately and consistently in comparison with the benefits of proposals for change.

A.5 The meaning of 'authoritative decision'

Applying a 'plain English' interpretation, an 'authoritative decision' is a decision which has been subject to sufficient scrutiny, at an appropriate level, to impart a degree of *authority*.

In the context of this series of reports, 'authoritative decisions' are limited to those of the European and domestic (UK wide) court judgments and rulings (see A.6 and A.7 below), Secretary of State, or the Scottish or Welsh Ministers and certain Planning Inspector (in Scotland Reporter) decisions in respect of a proposed plan or project (see A.8 and A.9 below), and certain legally enforceable management measures such as a bye-law or statutory order (included in Secretary of State decisions in A.8). Also included are Article 6(4) 'opinions' from the European Commission. However, in this report all of the decisions referred to are made by the European Court or a Secretary of State so, whilst the other types

of decision are explained in order to provide a complete context for the research, they are not considered further.

All of the types of decisions are explained in the following sub sections so that they can be better understood in respect of:

a) how they should be read in relation to each other (some authoritative decisions carry greater weight than, or may supersede, other decisions); and
b) how they should be read in relation to a case which might currently be under consideration (where the reader is seeking guidance from this report as to a decision to be made).

A.6 Decisions of the European Courts

The relevant European court was the European Court of Justice until 1st December 2009, when the provisions of the Lisbon Treaty came into force and the court became known as the Court of Justice of the European Union. For the purpose of this report, all cases are referred to simply as those of the 'European Court'.

The European Court has two principal functions. Firstly, deciding cases of dispute between, on the one hand, the European Commission (EC), seeking to enforce the terms of the Directives; and, on the other hand, member states, who may be accused by the EC of failure to comply with the Directives. In these cases the European Court issues 'judgments' following consideration of written material and oral hearings. A judgment issued in the case of such a dispute is referred to in the documentation in terms of an 'action' of the court, because the decision reached by the court carries direct consequences for the parties involved.

The European Court also provides 'preliminary rulings'. These are not intended to resolve a dispute in the European court itself, but to answer questions submitted to the European Court by a court of a member state. Questions will almost invariably relate to how the domestic court of the member state should properly interpret the Directives when making a judgment in their own court. These decisions are also included in the term 'judgments'. The documentation relates to the 'reference' or 'request' made to the court rather than an 'action' related judgment in the case of a dispute.

This report uses the generic term 'judgment' in respect of European Court decisions, unless it is important to distinguish that a particular case was a 'ruling'. All judgments of the European Court carry the greatest weight because they are binding on member states in terms of both decision making and domestic court proceedings.

Importantly, all judgments of the European Court are accompanied by an 'opinion' from an Advocate General of the Court. The Advocate General's opinion is published in order to inform the Court's judgment. The relevant opinion exerts considerable influence over the respective judgment. Opinions are also helpful because they often include more information concerning the details of the case concerned. The Advocate General's opinion carries less weight than the final judgment and the opinions are not binding on member states. However,

they are so influential and carry such weight in European Court judgments and rulings that they are regarded as 'authoritative decisions' in the context of this research.

European Court decisions are binding on member states. They must therefore be given due weight by competent authorities and the courts of member states. They provide the definitive interpretation of how the Directives should be interpreted. However, not all areas of potential uncertainty have been the subject of a case in the European Court. In the absence of a judgment from the European Courts, the UK Courts may need to make decisions based upon their own interpretation.

A.7 Judgments of the UK Courts

Decisions taken in the UK Courts, which are of relevance to the application of the Habitats Regulations arise from judgments in the 'High Court', the 'Court of Appeal', and the 'Supreme Court'.

Relevant legal proceedings will start in the High Court, and if the High Court judgment is not referred to the Court of Appeal it will stand. However, if a High Court judgment is referred to the Court of Appeal the latter judgment will prevail and the legal principles established are binding on subsequent High Court judgments. Similarly, if a Court of Appeal judgment is referred to the Supreme Court the latter judgment will prevail and the legal principles established are binding on all lower courts including the Court of Appeal.

In Scotland, the Outer House of the Court of Session is equivalent to the High Court and the Inner House of the Court of Session is equivalent to the Court of Appeal.

A.8 Decisions of the Secretary of State

A decision taken by a Secretary of State, or an equivalent decision made by the Scottish or Welsh Ministers, is regarded as authoritative because it has been considered by a Government Department and signed off at a Ministerial level. It will usually (for example in the case of orders for development consent) be accompanied by or contain a detailed record of the related Habitats Regulations Assessment. However, in this report there are no cases referred to which were made by either the Scottish or the Welsh Ministers. Relevant decisions made by a Secretary of State may relate to one of the following:

- an application for an 'Order for Development Consent' under the provisions of *The Planning Ac*t 2008 for a 'Nationally Significant Infrastructure Project'; or
- a consent required by a Secretary of State under primary legislation, for example, under the Electricity or Pipeline Acts; or
- in respect of a 'call-in' application, or a 'recovered' appeal under the provisions of the *Town and Country Planning Act* 1990 and related legislation (see further below), or
- the confirmation of a bye-law or other kind of statutory Order.

In this report the only decisions referred to are those relating to orders for development consent, and in one case a consent in respect of a pipeline. A decision made by a Secretary of State or the Ministers stands unless revoked or modified by them, or it is quashed by a Court because it has been challenged and found by the Court to be unlawful. The grounds

for such a challenge are limited and do not relate simply to the planning merits of the decision.

A.9 Decisions of Planning Inspectors and Reporters

Planning Inspectors (and in Scotland planning Reporters) are the decision maker (the competent authority in the terms of the Habitats Regulations) in their own right in respect of all delegated appeals against the decisions of local planning authorities, which are not 'recovered'. Appeals are considered by way of an exchange of written representations (the majority of cases); or by way of an exchange of written material followed by a public 'hearing', or in a small proportion of cases, considered by a prior exchange of written material followed by the calling and examination of evidence at a local public inquiry, conducted by the Inspector making the decision. In the context of this report, the most authoritative decisions of Planning Inspectors / Reporters are regarded to be those which have followed a public inquiry, because in these cases the evidence has been subject to particularly intense scrutiny and the parties will have had the opportunity to make legal and other submissions to the Inspector or Reporter, however 'hearing' cases may also be regarded as sufficiently authoritative where evidence has been subject to particular scrutiny.

Planning Inspectors also conduct the 'examination' of local development plan documents submitted to the Secretary of State, in order to test them for 'soundness' before they can be adopted. The Inspector's report to the local planning authority is binding, but it is the authority who adopts the plan, having made any changes required by the Inspector's report.

A.10 Article 6(4) Opinions of the European Commission

Under the provisions of Article 6(4) of the Habitats Directive, it is open to a member state to seek an opinion from the European Commission (EC) as to whether the justification for authorising a particular plan or project would amount to 'imperative reasons of overriding public interest'. These are cases where the competent national authority cannot ascertain that there would not be an adverse effect on a European site, because a priority habitat or species may be adversely affected. This would normally rule out the consideration of economic or social reasons to authorise the project, but the option is available to seek an opinion as to the merits of the case from the EC. If the EC agree that the plan or project can proceed, they will examine compensatory measures and advise the member state accordingly. These are regarded as 'authoritative decisions' in the context of this research, because they have been scrutinised by the EC and the Commission's opinion is published. These opinions are also helpful because in making the case as fully as possible; the member state must set out the details of the effects of the project on the qualifying features and must explain in detail its proposed compensatory measures.

A.11 A note of caution

Given the large number of cases investigated, and the large volume of documents in relation to each case that had to be read, it was beyond the capacity of the researchers to undertake any investigations as to the accuracy of data, or to test the outputs of predictive models, or to undertake any other corroborative or verification work, as part of this research. All figures and factual information in this report are drawn directly from the documents which were read during the research. They are taken at face value. No assurance can therefore be given as

to the accuracy or otherwise of information that was presented in the reports and decisions in the cases examined. For the purposes of this research it was sufficient to assume that all data recorded in the case reports and decisions were accurate and correct.

Having set out the basis on which this research considers a decision to be sufficiently 'authoritative' to be given weight in considering other decisions, it is worth bearing in mind that judgments stand unless superseded by a judgment in a higher court. Decisions made by the Secretary of State stand unless quashed by a Court, after having been challenged and found to be unlawful. Some decisions, and indeed, occasionally some domestic judgments, may not appear to be entirely consistent with established legal principles (for example those set by the European Court), or established approaches to decision making in terms of policy or scientific practice, but they nevertheless stand unless challenged or superseded. A judgment or a decision can only be made on the facts of the case as known at the time. If the evidence or arguments presented are incomplete or misleading the outcome may be affected. The application of case law evolves over time. Some judgments (or decisions taken in light of judgments at the time) may have been made before an important legal principle was established by a subsequent judgment.

For example, the Briels ruling in 2014 required a modification to the approach previously taken in respect of distinguishing mitigation and compensatory measures. Decisions made prior to this ruling did not have the benefit of that interpretation by the European court but were lawful and compliant at the time they were made.

Furthermore, no two cases are the same. What may initially appear to be inconsistency might, on closer examination, be a proper response to differences between the particulars of two cases which otherwise appear, at face value, to be equivalent.

It may be necessary, therefore, to consider the date of a decision or the extent to which a particular case is consistent with previous judgments or practice before relying upon it in a decision-making process. In the context of this report, this is not a serious problem, because the way in which a decision maker weighs the longevity of the effects of a proposal is usually a matter of planning judgement, rather than the application of a legal principle.

It is the responsibility of the reader therefore to interpret and apply the findings in this report appropriately. The findings and conclusions of the report should be considered fairly, as a whole, and not quoted, used or applied selectively, in order to support a pre-determined or preferred conclusion.

B Why the ‘longevity of effect’ is important to decision making

B.1 What is meant by ‘longevity of effect’

In the context of this report, the longevity of an effect relates to the duration or temporal nature of an effect upon a qualifying feature of a European site. For these ‘temporary’ effects, there are often two elements to consider. First, the effects of the construction, or the operation, which causes the change, such as the laying of a cable or pipeline in a trench, or the commencement and running of a noisy operation. Secondly, there is the recovery period, after the initial operation or change has finished. The longevity of some effects is inextricably linked to recovery times, the effect on the site may continue for much longer than it took to carry out the operation that caused it, although the effect may diminish as the habitat recovery matures. For noise disturbance on a bird population, the effect on the birds ceases as soon as the activity causing the noise stops; the individuals are no longer ‘disturbed’. However, where a feature has been physically compromised by an effect but is able to recover, as in the case of the trench digging and backfilling, the change may continue to exert an influence after it has been completed, until such time as the habitat affected has returned to a comparable level of ecological functionality to that present before the work on the trench began. In the context of this report it has been necessary to distinguish between the initial operation and the ‘recovery’ time for several cases when considering the overall ‘longevity’ of the effect.

The duration or longevity of an effect can be clearly defined in quantitative, usually numerical terms (such as days, weeks, months or years). In many cases however, there is less precision; the duration of an effect might be referred to in more general terms such as ‘short term’, ‘medium term’ or ‘long term’. What is meant by these less precise terms can be subject to a degree of interpretation. No matter how the longevity of an effect might be referred to, however, it is the duration or time that the effects will exert an influence upon a European site with which this report is concerned.

B.2 How the longevity of an effect relates to the Habitats Regulations Assessment process

The longevity of an effect is an important consideration in decision making under the Habitats Regulations. This is because it is closely related to the specific legal tests against which a proposed plan or project needs to be assessed.

Figure B.1 on the next page provides an outline of the four stage process of Habitats Regulations Assessment. Few plans or projects will progress to stages 3 and 4 so the majority of the authoritative decisions referred to in this report concern the stage 1 ‘screening’ test and the stage 2 ‘appropriate assessment’ and ‘integrity test’. These initial stages are briefly introduced below.

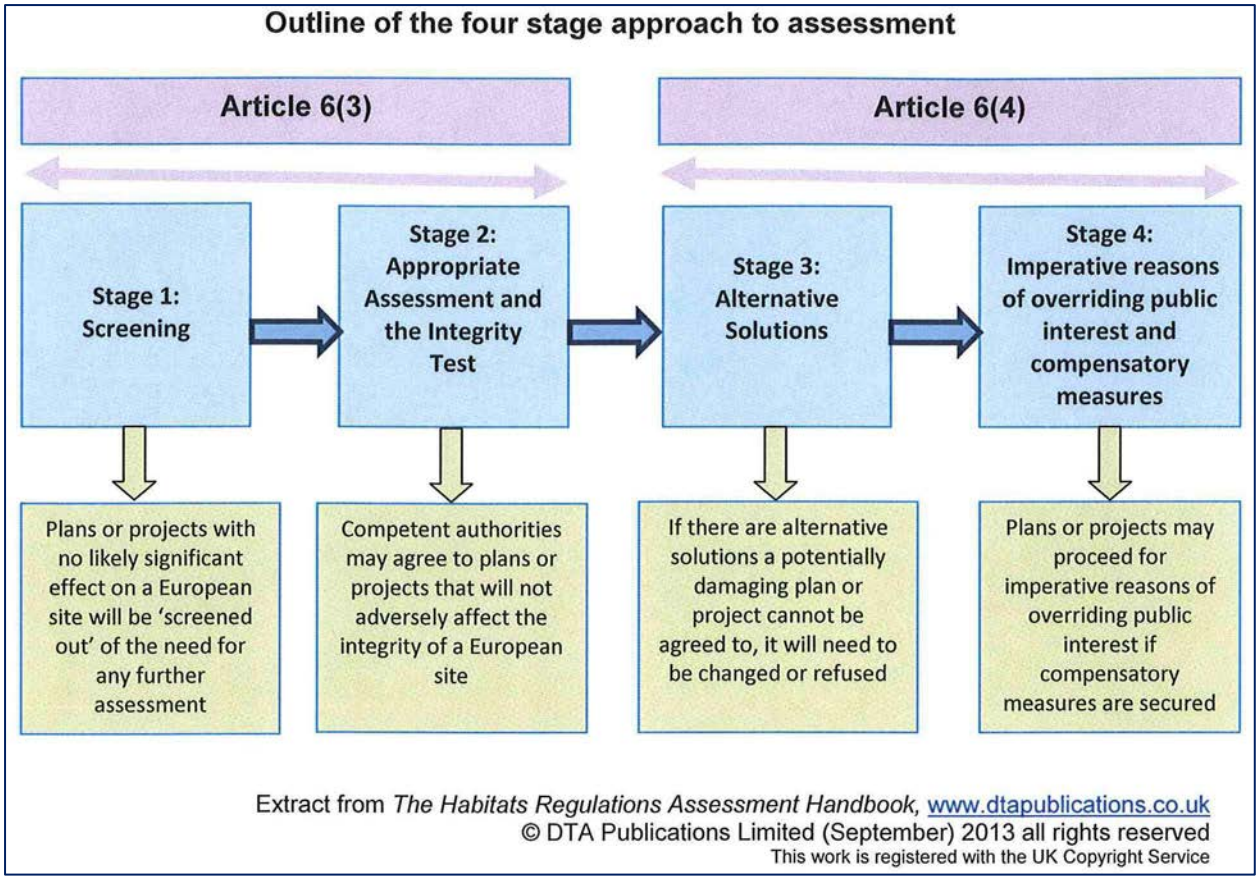

Figure B.1: Outline of the four stage approach to a Habitats Regulations Assessment

Stage 1: the 'screening' test

If it is not directly connected with or necessary to site management the decision-maker must determine whether a proposed plan or project is likely to have a significant effect[6] on the site. The decision on whether an appropriate assessment is necessary should be made on a precautionary basis. This is in line with the European Court's ruling in Case C-127/02 hereafter referred to as the Waddenzee judgment[7], which states that:

"*any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects*."

Taking account of advice from the statutory nature conservation body, they should consider whether the effect of the proposal on the site, either individually or in combination with other proposals[8], is likely to be significant in terms of the ecological objectives for which the site was designated, classified or listed. The statutory nature conservation body in England and

[6] Regulation 61(1)(a)
[7] *Landelijke Verenigning tot Behoud Van de Waddenzee, Nederlandse v Vereniging tot Bescherming von Vogels v Straatssecretaris Van Landbouw, Natuurbeheer en Visserij* (C-127/02: [2005] Env. LR14 [ECJ])
[8] Regulation 61(1)(a)

its territorial waters out to 12 nautical miles (nm) is Natural England. Beyond that, in offshore waters, it is usually the Joint Nature Conservation Committee (JNCC), but arrangements have been made in some cases for Natural England to be the single consultee for both jurisdictions for projects, such as offshore wind farms, which may straddle the 12nm limit.

If a plan or project would not be likely to have a significant effect on the site alone, it should nevertheless be considered in combination with other plans and projects to establish whether there may be a significant effect arising from their combined impacts.

Stage 2: The 'appropriate assessment' and 'integrity test'

If the decision-maker concludes that a proposed plan or project not directly connected with or necessary for site management is likely to significantly affect a European site, they must make an 'appropriate assessment' of the implications of the proposal for the site in view of the site's conservation objectives[9]. These relate to each of the qualifying features for which the site was designated, classified or listed and will be provided by the statutory nature conservation body. The scope and content of an appropriate assessment will depend on the nature, location, duration, frequency, timing and scale of the proposed project and its effects, and the qualifying features of the relevant site. It is important that an appropriate assessment is made in respect of each qualifying feature for which a likely significant effect has been identified, and for each designation where a site is designated, classified or listed under more than one international obligation.

In the Waddenzee judgment, the European Court ruled that an appropriate assessment implies that all the aspects of a plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field.

In the light of the conclusions of the appropriate assessment, the decision-maker must determine whether it can ascertain that the proposal will not adversely affect the integrity of the site(s)[10]. This test incorporates the precautionary principle. It is not for the decision-maker to show that the proposal would harm the site, in order to refuse the proposal. It is for the decision-maker to consider the likely and reasonably foreseeable effects and to ascertain that the proposal will not have an adverse effect on the integrity of the site before it may grant permission. If the proposal would adversely affect integrity, or the effects on integrity are uncertain but could be significant[11], the decision-maker should not grant permission, subject to the provisions of regulations 62 and 66, which relate to alternative solutions, imperative reasons of overriding public interest and compensatory measures. These are not discussed further in this report because they are not relevant to the research.

In the Waddenzee judgment, the European Court also ruled that a plan or project may be authorised only if a decision maker has made "*certain*" that the plan or project will not

[9] Regulation 61(1)
[10] Regulation 61(5)
[11] See *ADT Auctions Ltd v Secretary of State Environment, Transport and the Regions and Hart District Council* (2000) JPL 1155 at p. 1171 where it was held that, it was implicit in the wording of regulation 61(5) that the adverse effect on the integrity of the site had to be a significant adverse effect.

adversely affect the integrity of the site. "*That is the case where no reasonable scientific doubt remains as to the absence of such effects*." Decision-makers must be "*convinced*" that there will not be an adverse effect and where doubt remains as to the absence of adverse effects, the plan or project must not be authorised, subject to the procedure outlined in Article 6(4) of the Habitats Directive[12].

The integrity of a site is the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified, designated or listed[13].

In determining the effect on site integrity, the advice of the statutory nature conservation body, the conservation objectives and any additional representations will need to be carefully considered. The UK courts have held that considerable weight should be given to the representations of the statutory nature conservation body and their advice should be adopted unless there are cogent and compelling reasons not to do so[14].

As part of the judgement on integrity, the decision-maker must consider the way in which it is proposed to carry out the project and whether conditions or other restrictions would enable it to ascertain that site integrity will not be adversely affected[15]. The decision-maker should consider whether a consent could be issued in accordance with regulation 61 subject to conditions. In practice, this means that it should identify the potential risks so far as they may be reasonably foreseeable in light of such information as can reasonably be obtained, and put in place a legally enforceable framework with a view to preventing the risks from materialising[16].

B.3 How the longevity of an effect might influence the stage 1 and 2 conclusions

The longevity of an effect is relevant to both the stage 1 screening decision and the stage 2 integrity test. In terms of the screening decision the extent to which an effect might 'undermine the conservation objectives' will be influenced by its duration. An effect over a very small timescale might not undermine the conservation objectives, whilst the same scale of effect over a much longer or permanent timescale could. Likewise, a short term effect upon a feature which is able to rapidly recover will be less significant than the same effect upon a feature which will take much longer to recover, or where there is uncertainty regarding the potential for recovery. A point will be reached where the duration of an effect (or uncertainty associated with recovery) would be considered to undermine the conservation objectives and an appropriate assessment would be required.

[12] Regulation 62
[13] *Habitats Regulations Assessment* draft guidance from Defra July 2013, and formerly in Government Circular: *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*. ODPM Circular 06/2005
[14] *R (Akester and Anor) v DEFRA and Wightlink Ferries* [2010] EWHC 232 (Admin)
[15] Regulation 61(6)
[16] See *WWF-UK Ltd and RSPB – v – Secretary of State for Scotland et al* [1999]1 C.M.L.R. 1021 [1999] Env. L.R. 632 opinion of Lord Nimmo-Smith

Turning to the stage 2 integrity test, in light of the accepted definition of integrity quoted in B.2 above, a site's integrity is inextricably linked to the concept of the longevity of an effect, which will clearly be a factor in whether it is possible for a competent authority to ascertain that the proposed plan or project will have no adverse effect on the integrity of the site concerned.

C The Case Studies

C.1 Selection

The researchers compiled a list of potentially relevant cases drawn from:

i. their own library of decisions, and their empirical knowledge of case work;
ii. a further web-based search of European Court judgments and opinions;
iii. a web-based search for decisions relating to nationally significant infrastructure projects and projects consented under the Electricity and Pipeline Acts in England and Wales and their territorial and UK offshore waters; and
iv. suggestions made by officers in Natural England following an e-mail enquiry of case officers by the research project manager.

In the investigations for all three research reports in January and February 2015, over 180 cases were identified as being relevant to the assessment of plans and projects affecting European sites. Following an initial screening exercise, nine of these decisions were selected for detailed examination in this review, being relevant to the consideration of how decision-makers had taken account of the duration of effects and recovery periods. However, for the final report one case was omitted because the consideration of the possible temporary effects on a heathland SPA was more about planning issues, related to the timing of implementation of adopted policy measures and enforceability of planning conditions, than a consideration of what the temporary effects on the heathland birds would actually be if planning permission was given for a dwelling without a contribution to the mitigation measures required by the development plan. The remaining eight cases are summarised in Table C.1.

C.2 The summary table

Table C.1 below lists the cases which were identified as relevant to this report in that the longevity of an effect was material to the decision taken.

These cases are then subsequently considered in more detail in part E which is in the form of an Appendix.

Table C.1:

a) identifies the case by reference, title or familiar short title;
b) provides the date of the decision (or principal decision) and the decision maker;
c) sets out the key point or a quotation (with emphasis added) from the decision relevant to the longevity of the effect.

Table C.1: Summary table of the 9 cases reviewed in this report		
Decision	**Date**	**Key quotes relating to longevity of effect**
EC vs Spain C-404/09 the Alto Sil	24/11/11 European Court	The effects of mining projects were considered and the Advocate General's Opinion stated *"Even after the mining operations have ceased, it will be a long time before the land surfaces return to a comparable level of ecological functionality, if indeed it ever can"*.
Briels v Minister van Infrastructuur en Milieu C-521/12	15/05/14 European Court	The effects of a road project were considered; the *'integrity of the site' should be viewed as a whole in the sense that it is its enduring essential character which must be considered, rather than insignificant and transient fluctuations in quality or area of a particular habitat.*
Sweetman vs An Bord Pleanala C-258/11	11/04/13 European Court	The effects of a road project were considered and the Advocate General's Opinion stated*...some strictly temporary loss of amenity which is capable of being fully undone... would not (as I understand it) be an adverse effect on the integrity of the site.*
Hornsea One offshore wind farm	10/12/14 Secretary of State	*"...the in combination impacts upon these interest features are expected to be only temporary in nature. The mitigation measures proposed by the Applicant are expected to ensure recovery of the habitats within 1 year and result in no long term reduction in habitat extent.*
Walney Extension offshore wind farm	07/11/14 Secretary of State	The installation of the export cable through the mud and sand flats, which were a qualifying feature of the SAC and a supporting feature of the SPA, would not have an adverse effect on integrity of the SAC... because... the physical habitat will recover...
Hinkley Point C nuclear power station	19/03/13 Secretary of State	*"...The loss of this rocky shore habitat was assessed in the applicant's HRA by mapping the intertidal habitats in the construction area and assessing their level of recoverability. All were found to have a medium to high recoverability, with full recovery expected within 5-10 years."*
Kentish Flats Extension offshore wind farm	19/02/13 Secretary of State	*"...disturbance and displacement within the SPA as a result of the East Anglia One cable laying activity will be temporary"*
Gilwerne gas pipeline	08/07/02 Secretary of State	*"It is reasonable to consider the 1 to 2 years that the 1ha turfed area is likely to take to restore its full species composition (i.e. restoration in area and quality), as de minimis. This would not therefore represent an adverse effect on the integrity of the cSAC. In contrast, the DTI is of the view that the 10-12 year-long effect on the 1.5ha of cSAC habitat which will not be turfed cannot be considered de minimis, and thus should be considered as an adverse effect on the integrity of the site*"

D Discussion and conclusions

D.1 Introduction

This section discusses the findings of the research for the eight cases and discusses their implications for decision-makers. Part E is an appendix, providing more detail about the projects and their effects.

D.2 Determining the effects on site integrity

Table D.1 below summarises the timescale of the implementation of the construction or operation that caused the effect on the site and the anticipated recovery time and whether they were regarded by the decision maker as potentially an adverse effect on integrity (or might otherwise be unacceptable).

Table D.1: the longevity of effects and their duration and recovery timescales

Decision	Duration of project and its effects on the site	Recovery period	AEOI
EC vs Spain C-404/09 Alto Sil	Un-quantified but >20yrs	Uncertain	Yes
Briels v Minister van Infrastructuur en Milieu C521/12	'transient'	n/a	No
	'long term deterioration'	n/a	Yes
Sweetman vs An Bord Pleanala C-258/11	'strictly temporary'	'capable of being fully undone' / 'could be made good'	No
	'permanent destruction' 'permanent', 'long lasting'	'irreparable'	Yes
Hornsea One Project	Un-quantified duration whilst laying the cable (assumed <1yr)	Within 1 year (no long term reduction)	No
Walney Extension	Un-quantified duration whilst laying the cable (assumed <1yr)	Dependent on qualifying features affected, but implies 6 months – 3 years	No
Hinkley Point C	Jetty effects last for approx 10 years	Approximately 2 years (5-10 years for rocky shore habitat)	No
Kentish Flats Extension	Un-quantified duration 'temporary'	Not specified	No
Gilwerne Pipeline	Un-quantified duration whilst laying the pipeline until turves replaced, assumed <1yr	1-2 years for turfed area to recover	No
	Un-quantified duration whilst laying the pipeline, assumed <1yr	10-12 years for un-turfed area, (with uncertain success)	Yes

As explained in section B above, the Habitats Regulations are concerned with whether an effect *'undermines the conservation objectives'* (stage 1 screening decision) or whether it can be ascertained that an effect would not be '*adverse'* with regard to *'the integrity of the site'* (the stage 2 integrity test). These decisions require consideration of other effects than those relating to longevity and recovery including, in particular, the spatial scale and timing of effects (for example cumulative effects occurring simultaneously) confidence in recovery

and ecological functions that may be temporarily lost, suspended or displaced along with the general value, characteristics and specific environmental conditions of the area affected. In all of the cases the objective was to see if the ecological functionality could be restored, with regard to the timescale of and confidence in recovery.

The cases show that no 'rule of thumb' has been applied in any decision regarding the longevity of an effect or in respect of recovery periods. In many cases the decision regarding longevity also made reference to the 'scale of effect' which is the subject of a separate but related report[17]. The Walney extension case provides a good example, where the advice from Natural England was based on the recoverability of the habitat affected and also the small spatial scale of the effect. It should not therefore be assumed, through reliance on the Walney decision, that Natural England would apply the same approach to their advice in respect of an equivalent effect over a much larger spatial scale, simply on the basis that the habitat affected will eventually recover.

With the exception of plans and projects which have 'no appreciable effect', the decisions taken by the European Court in the cases of ***Briels*** and ***Sweetman*** suggest that permanent destruction of a qualifying habitat should not be regarded as acceptable. An effect which is considered to be *'lasting'* or which results in '*long term deterioration'* would be considered as 'adverse'. What the Court means by these terms is open to a degree of interpretation; they do not provide any defined quantitative timescales against which to assess the acceptability of an effect which might not be permanent.

Taken together, the decisions provide a general indication of the types of situation where decision-makers found that 'temporary' effects could be regarded as acceptable. Hornsea One, Walney Extension and Gilwerne Pipeline all indicate that small scale, temporary effects of construction that would recover full ecological function in less than 5 years may be regarded as acceptable. In these cases appropriate mitigation measures were integrated into the project to provide the necessary confidence in the expected recovery.

The decision taken in respect of the Gilwerne pipeline suggests that cases where recovery was uncertain and where recovery timescales extended beyond 10 years, after even a short construction period, may not be acceptable. On the other hand, the 'temporary' effects of the Hinkley Point C power station jetty extended up to 20 years (10 years presence on site and up to 10 years recovery for one feature) but were deemed not to be an adverse effect on site integrity, largely because the scale of the effect and the relative importance of the area affected also influenced the decision.

D.3 Conclusions

As previously explained, with only eight relevant cases, several of which had limited information about timescales of construction effects; and a general lack of quantitative data or specificity about recovery timescales, a degree of caution should be applied in drawing conclusions. Each case has to be considered on its merits and in light of the characteristics

[17] CHAPMAN, C. & TYLDESLEY, D. 2016. Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites - a review of authoritative decisions. Natural England Commissioned Reports, Number205.

and specific environmental conditions at the site. However, taking the cases as a whole, the following conclusions can be reasonably drawn from the case studies.
An effect which can be regarded as ‘transient’ or ‘strictly temporary’, and which is capable of being fully undone, or made good, would be unlikely to represent an adverse effect on the integrity of a European site.

With the exception of plans or projects which have ‘no appreciable effect’, and taking account of the scale of the effect and the ecological function or value of the area affected, a ‘lasting’ effect which might result in either:

a) the permanent destruction of part of a qualifying habitat; or
b) the ‘long term deterioration’ of a qualifying feature.

Would be likely to be regarded as an adverse effect upon the integrity of the site.

With the exception of effects which can be regarded as ‘insignificant’ and taking account of the ecological function or value of the area affected, decisions relating to the longevity of an effect are generally influenced by the following factors:

- Whether an effect is ‘capable of being fully undone’ or ‘made good’;
- Whether the spatial scale of an effect is regarded as ‘acceptable’ in the short term;
- Whether mitigation measures which are an integral part of the project provide sufficient confidence that the affected area(s) will return to a comparable level of ecological functionality.

E Appendix - Case Summaries

Decisions of the European Court

The supporting documentation for the cases reviewed below in respect of decisions taken by the European Courts (F.1 to F.3) can be found on the European Court's InfoCuria website:

http://curia.europa.eu/juris/recherche.jsf?language=en

E.1 European Commission v Spain C-404/09 (Alto Sil)

E.1.1 Description of development

The authorisation of various open cast mining projects without a prior assessment. The case considers the effects of noise, vibration and fragmentation of habitat leading to isolation of sub populations within the Alto Sil SPA and SAC. The summary below concerns only those aspects of the case where the 'longevity of effect' is relevant.

E.1.2 Location

The 'Alto Sil' site is located in the north-west of the region of Castile- León in Spain, close to the regions of Galicia and Asturias, situated at the upper reaches of the river Sil.

E.1.3 Date of decision

24th November 2011.

E.1.4 Decision maker

European Court – judgment.

E.1.5 Area of designated site and relevant qualifying features

The Alto Sil SPA and SAC site covers an area of 43,706 hectares.

Special Area of Conservation: The standard data form used to notify the site to the Commission makes reference to 23 Annex I habitats present on the site and numerous qualifying species. With reference to the particulars of the case in question the form refers to 10 to 15 individuals of the brown bear (a priority species) as well as the following non priority habitat types:

- 4030 – European dry heaths (50% of the site, over 21,000ha);
- 4090 – Endemic oro-Mediterranean heaths with gorse (6% of the site, approximately 2,600ha);
- 6160 – Oro-Iberian *Festuca indigesta* grasslands (1% of the site, approximately 430ha);
- 8220 – Siliceous rocky slopes with chasmophytic vegetation (2% of the site, approximately 875ha);
- 8230 – Siliceous rock with pioneer vegetation of the *Sedo-Scleranthion* or of the *Sedo albi-Veronicion dillenii* (13% of the site, over 5,500ha); and
- 9230 – Galicio-Portuguese oak woods with *Quercus robur* and *Quercus pyrenaica* (6% of the site, approximately 2,600ha).

Special Protection Area: The Standard Data Form for the Alto Sil refers to numerous Annex I bird species but, with reference to this case, notes 42 to 47 males of the Cantabrian subspecies of the capercaillie (*Tetrao urogallus cantabricus*). The population of the capercaillie species present on the site is of regional importance (50% of the males of the

Autonomous Community of Castile-León) and of national importance (2% of the males present on Spanish territory).

E.1.6 The nature and duration of effects associated with the project

The unauthorised open cast mining activities exerted the following effects upon the Alto Sil European site:

Habitat loss and fragmentation: The effects associated with habitat loss from open cast mining activities were certainly 'long term', however, they would not be permanent as re-naturalisation could occur after the resources are fully exploited and the mines are no longer operational. The footnotes to the Advocate General's Opinion[18] clarify that the habitats affected included 45.64 hectares (0.2% of feature) of habitat type 4030 – European dry heaths, 6.52 hectares of habitat type 8220 – Siliceous rocky slopes with chasmophytic vegetation, and 19.09 hectares (0.7% of feature) of habitat type 9230 – Galicio-Portuguese oak woods with *Quercus robur* and *Quercus pyrenaica.*

Restoration of these habitat types would require careful management and would not be straightforward. Paragraph 44 of the Advocate General's Opinion made a note of this uncertainty in terms of returning the area to a 'comparable level of ecological functionality':

> *"The land surface areas directly affected can therefore no longer make any contribution to the conservation of the capercaillie, at least not until they are naturalised. Even after the mining operations have ceased, it will be a long time before the land surfaces return to a comparable level of ecological functionality, if indeed it ever can"*.

Disturbance (noise/vibration/visual): Likewise the disturbance effects associated with the project would occur throughout the operational lifetime of the mines. However recovery would be immediate in that the disturbance would cease once the mining activities stopped.

E.1.7 Decision

The Court ruled that Spain did not comply with Article 6(3) of the Habitats Directive by failing to carry out an 'appropriate' assessment. Whilst the longevity of the effects was referred to in the Advocate General's opinion the 'temporary' nature of the effects appeared to play little part in assisting the defence of the case for Spain.

E.2 Briels v Minister van Infrastructuur en Milieu C-521/12

E.2.1 Description of case

This case concerned a request from the Raad Van State (Netherlands) for a preliminary ruling by the European Court. In summary, the Minister had adopted an order which involved the widening of the A2 motorway. The project affected the Vlijmens Ven, Moerputten & Bossche Broek SAC which hosted the non-priority habitat type *Molinia* meadows. An assessment had concluded that the possibility of significant adverse effects due to nitrogen deposition could not be ruled out. The Minister had subsequently provided for a project aimed at mitigating the environmental effects which were referred to in paragraph 13:

> *"In that regard the A2 motorway project provides for improvements to the hydrological situation in Vlijmens Ven, which will allow the molinia meadows to expand on the site. The Minister states that this will allow for the development of a larger area of molinia meadows of higher quality, thereby ensuring that the conservation objectives for this habitat type are maintained through the creation of new molinia meadows."*

[18] Refer footnote 79

Briels and others brought legal action against the two ministerial orders before the referring court in the Netherlands, taking a view that the Minister could not lawfully adopt the order for the A2 project, given the negative implications for the SAC. The grounds were that the proposed development of new *Molinia* meadow cannot be regarded as a "mitigating measure" and should be viewed as compensatory.

E.2.2 Location
The Vlijmens Ven, Moerputten & Bossche Broek SAC is located in North Brabant in the Netherlands.

E.2.3 Date of decision
15th May 2014.

E.2.4 Decision maker
European Court – ruling.

E.2.5 Area of designated site and relevant qualifying features
The Vlijmens Ven, Moerputten & Bossche Broek SAC extends to 897ha. The standard data form for this site lists four Annex I habitat types including the habitat type 6410 '*Molinia* meadow on calcareous, peaty, or clayey-silt-laden soils (*Molinion caeruleae)*'.

E.2.6 The nature and duration of effects associated with the project
The effects associated with the proposed widening of the A2 motorway were summarised in paragraph 12 of the judgment which states that '*Molinia meadows would be affected due to drying out and acidification of the earth'*. The effects of concern are therefore those of air pollutants and changes to site hydrology.

Once the project was completed the effects of acidification would be permanent for as long as the road was in use, or at least until technological advances led to cleaner emissions from vehicles using it.

The specific nature of the hydrological changes are unclear but it is assumed that they would be permanent.

E.2.7 Decision
Whilst the case itself was not directly concerned with longevity of effects *per se*, the Advocate General made some interesting observations in her opinion which are of relevance to this report regarding the link between the longevity of an effect and the concept of site integrity. Paragraph 41 of the Opinion reads as follows (emphasis added):

"I can agree that the 'integrity of the site' should be viewed as a whole in the sense that it is its enduring essential character which must be considered, rather than <u>insignificant and transient</u> fluctuations in quality or area of a particular habitat. However, it seems to me that <u>long-term deterioration</u> of an existing natural habitat is something which necessarily concerns enduring essential character rather than insignificant and transient fluctuations."

Essentially therefore, 'fluctuations' in the ecological characteristics of a site which are 'insignificant and transient ' have a limited influence over the concept of a site's integrity. However, deterioration of a habitat which is 'long term' would compromise the 'enduring essential character' and hence be relevant to the integrity of the site concerned.

E.3 Sweetman v An Bord Pleanala C-258/11

E.3.1 Description of case

This case concerned a request from the Supreme Court in Ireland for a preliminary ruling by the European Court. The case related to proceedings between (i) Mr Sweetman, Ireland, the Attorney General and the Minister for the Environment, Heritage and Local Government and (ii) An Bord Pleanála (the Irish Planning Board), supported by Galway County Council and Galway City Council, concerning An Bord Pleanála's decision to grant consent for the N6 Galway City Outer Bypass road scheme. The Supreme Court referred the following questions to the European Court for a preliminary ruling (emphasis added):

> 1. What are the criteria in law to be applied by a competent authority to an assessment of the likelihood of a plan or project the subject of Article 6(3) of the Habitats Directive, having "an adverse effect on the integrity of the site"?
> 2. Does the application of the precautionary principle have as its consequence that such a plan or project cannot be authorised if it would result in the <u>permanent non-renewable loss of the whole or any part of the habitat in question</u>?
> 3. What is the relationship, if any, between Article 6(4) and the making of the decision under Article 6(3) that the plan or project will not adversely affect the integrity of the site?

E.3.2 Location

The proposed N6 Galway City Outer Bypass road scheme in question was to cross the Lough Corrib SCI.

E.3.3 Date of decision

11th April 2013.

E.3.4 Decision maker

European Court – ruling.

E.3.5 Area of designated site and relevant qualifying features

The Standard data form submitted to the EC in respect of the Lough Corrib SCI gave the area of the site as 25,247ha. The site was designated for the presence of 8 qualifying Annex I habitat types, including the priority habitat type 8240 'limestone pavement', and three Annex II species.

E.3.6 The nature and duration of effects associated with the project

The construction of the proposed bypass was a major scheme with a range of potential effects. Some effects associated with the construction phase would be regarded as temporary, whereas effects arising from habitat loss and operation of the road were permanent. The effect with which the case was most concerned was the direct habitat loss of limestone pavement, which would be a permanent effect.

E.3.7 Decision

Whilst the case is not primarily concerned with the longevity of an effect *per se*, in considering the spatial scale of an effect (which the case was concerned with) the Advocate General made some relevant observations in her Opinion regarding the longevity of an effect and the concept of site integrity. Paragraphs 59-61 of the Opinion state (emphasis added):

"59. A plan or project may involve some <u>strictly temporary loss of amenity which is capable of being fully undone</u> – in other words, the site can be restored to its proper conservation status within a short period of time. An example might be the digging of a trench through earth in order to run a subterranean pipeline across the corner of a site. <u>Provided that any disturbance to the site could be made good, there would not (as I understand it) be an adverse effect on the integrity of the site</u>.

60. Conversely, however, measures which involve the permanent destruction of a part of the habitat in relation to whose existence the site was designated are, in my view, destined by definition to be categorised as adverse. The conservation objectives of the site are, by virtue of that destruction, liable to be fundamentally – and irreversibly – compromised. The facts underlying the present reference fall into this category.

61. The third situation comprises plans or projects whose effect on the site will lie between those two extremes. The Court has not heard detailed argument as to whether such plans or projects should (or should not) be considered to generate an 'adverse effect on the integrity of the site'. I consider that it would be prudent to leave this point open to be decided in a later case."

In paragraph 59 the Opinion highlights the importance of the potential for recovery where a temporary effect is to be considered acceptable. A 'temporary' effect from which a feature cannot recover is not to be regarded in the same way as a temporary effect from which the feature can make a full recovery. The Opinion continued at para 76: "*An effect which is permanent or long lasting must be regarded as an adverse one. In reaching such a determination, the precautionary principle will apply*".

The importance of the longevity of an effect, with regard to a decision about the integrity of a site, was affirmed by the court in the subsequent judgment in several places (emphasis added):

"...once all aspects of the plan or project have been identified which can, by themselves or in combination with other plans or projects, affect the conservation objectives of the site concerned, and in the light of the best scientific knowledge in the field – are certain that the plan or project will not have lasting adverse effects on the integrity of that site." (paragraph 40).

"The competent national authorities cannot therefore authorise interventions where there is a risk of lasting harm to the ecological characteristics of sites which host priority natural habitat types. That would particularly be so where there is a risk that an intervention of a particular kind will bring about the disappearance or the partial and irreparable destruction of a priority natural habitat type present on the site concerned." (paragraph 43).

"Consequently, if... the competent national authority concludes that that plan or project will lead to the lasting and irreparable loss of the whole or part of a priority natural habitat type whose conservation was the objective that justified the designation of the site concerned as an SCI, the view should be taken that such a plan or project will adversely affect the integrity of that site." (paragraph 46).

"...a plan or project not directly connected with or necessary to the management of a site will adversely affect the integrity of that site if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation was the objective justifying the designation of the site in the list of SCIs, in accordance with the directive." (paragraph 48).

Decisions of the Secretary of State

All the documentation referred to in the Secretary of State decisions for the Nationally Significant Infrastructure Projects reviewed below (cases F4 to F.7) can be found on the National Infrastructure Planning Portal webpage:

http://infrastructure.planningportal.gov.uk/projects/

E.4 Hornsea Project 1 offshore wind farm

E.4.1 Description of development

1,200MW offshore wind farm comprising either two generating stations of 600MW or three of 400MW, with up to 240 turbines.

E.4.2 Location

North Sea approximately 103km from the East Riding of Yorkshire coast entirely in UK offshore waters (except for cable connections).

E.4.3 Date of decision

10th December 2014.

E.4.4 Decision maker

Secretary of State DECC.

E.4.5 Area of designated site and relevant qualifying features

The Secretary of State concluded that likely significant effects either alone or in combination with other plans or projects, could not be excluded in respect of five European sites in England, in respect of a range of qualifying features including breeding sea birds, fish and habitats. The sites were Flamborough Head and Bempton Cliffs SPA, the Flamborough and Filey Coast pSPA, the Humber Estuary SPA, the Humber Estuary Ramsar site and the Humber Estuary SAC.

E.4.6 The nature and duration of effects associated with the project

The assessment undertaken in respect of Hornsea identified various potential effects; with relevance to this report the assessment considered the effects associated with the laying of an export cable across the Humber Estuary SAC. A section of approximately 3.2km would be laid across the SAC with potential effects upon:

- 174.8ha estuaries (0.47% of feature);
- 157.2ha mudflats (1.68% of feature);
- 4.8ha *Salicornia* and other annuals colonising mud and sand (7.8% of feature);
- 0.012ha embryonic shifting dunes (0.03% of feature).

The project included detailed mitigation measures to ensure a rapid recovery of affected habitats once the cable had been laid. Paragraph 8.6 of the Habitats Regulations Assessment states "*Evidence of recovery is expected to be visible within a few months, with full recovery due within one year, and result in no long term reduction in habitat extent".*

E.4.7 Decision

The final decisions with regard to the effects of the export cable also took account of potential in combination effects. The effects of the project 'alone' are outlined above but in combination effects were identified with proposed flood defence schemes and Hornsea

project 2. The extent of the SAC habitats likely to be affected by Hornsea one in combination with other plans and projects increased to:

- 275.6ha estuaries feature (0.75% of feature)
- 210.7ha mudflats (2.24% of feature)
- 9.6ha *Salicornia* and other annuals colonising mud and sand (16% of feature)
- 0.22ha embryonic shifting dunes (0.2% of feature)

Paragraph 8.15-8.16 of the Habitats Regulations Assessment stated:

"8.15 Despite the potential increase in affected habitat extent, as with impacts of the project alone..., the in combination impacts upon these interest features are expected to be only temporary in nature. The mitigation measures... proposed by the Applicant are expected to ensure recovery of the habitats within 1 year and result in no long term reduction in habitat extent. This prediction is in line with the observed recovery rates of habitats affected by similar works in the UK and around Europe.

8.16 As the Examination progressed, the concerns about the in combination impacts of the Tetney to Saltfleet and the Phillips 66 projects were resolved. Representations were submitted which indicated that there would be no temporal overlap between the Hornsea works and the Phillips 66 project, or with the Tetney to Saltfleet tidal flood defence scheme."

Of relevance to the decision, the applicant had concluded that the in combination effects of Hornsea projects 1 & 2 would not have an adverse effect on the integrity of the site; Natural England had agreed with this assessment. The Examining Authority's view was also that there would be no adverse effect, but their report recognised the uncertainty regarding cumulative effects due to the lack of information regarding the specific details of Hornsea 2. The Secretary of State considered all of the representations and was satisfied that:

"the Hornsea project, either alone or in combination with other plans and projects (except Hornsea Project 2), will not have an adverse effect upon the integrity of the Humber Estuary SAC. The Secretary of State has not included Hornsea Project 2 within the in combination assessment as there is too much uncertainty about this project to carry out the assessment at this time. The Secretary of State is satisfied that the impacts of this proposal will be considered in full at the time of determination, noting that it could not be lawfully consented should it not be possible to exclude an adverse effect upon the integrity of the Humber Estuary SAC."

There is nothing to suggest that the Secretary of State anticipated that the in combination assessment with Hornsea 2 would generate a problem in respect of the temporal effects from cable laying (with which this report is most concerned). Hornsea 2 would be a significant project, and the Secretary of State's approach was legitimate in that there was no reason to penalise the Hornsea 1 project because of the possible effects of an application that had not yet been made and which would have to go through the Habitats Regulations Assessment process, in combination with other plans and projects.

An Order for development consent was made.

E.5 Walney Extension offshore wind farm

E.5.1 Description of development

750MW, offshore wind farm extending to approximately 149 square kilometres with 207 turbines up to 222m to blade tip.

E.5.2 Location
The Irish Sea, north-west of the existing Walney I and II wind farms, 19km west of the Cumbrian coast and 31km south-east of the Isle of Man, mainly located in UK offshore waters. The proposal including ancillary development including a cable run to shore which would cross Middleton Sands, in Morecambe Bay.

E.5.3 Date of decision
7th November 2014.

E.5.4 Decision maker
Secretary of State DECC.

E.5.5 Area of designated site and relevant qualifying features
Morecambe Bay SAC is 61,506 hectares. On the Standard Data Form saltmarsh habitat is recorded as 2.99% of the total SAC area which would be 1,839 hectares. Intertidal mudflats and sand flats are recorded on the form as extending to 34.2% which would be 21,305 hectares. The intertidal mudflats and sand flats are also a supporting habitat for the birds for which the Morecambe Bay SPA was classified. The SPA extends to some 37,404 hectares.

E.5.6 The nature and duration of effects associated with the project
The assessment considered the effects, in respect of the loss of intertidal mudflats and sand flats, caused by cable laying and the associated placement of rock armour. A likely significant effect could not be ruled out for this proposal alone (and also in combination with other plans or projects, namely other offshore wind farms requiring cables to be laid across the SAC). Consequently, an appropriate assessment was carried out in respect of intertidal mudflats and sand flats for both the SAC and the SPA.

Natural England's written representations referred to a published 2013 review[19] which summarised the available information on recovery of intertidal sedimentary habitats. Paragraph 6.5.4 of their written representations went on to state:

"...Recolonisation of disturbed areas ranges from a few weeks to years, depending on how opportunistic the species are. For this type of habitat, which incurs natural disturbance due to shifting sediments, then its characteristic species are likely to be resilient to change. For example, the opportunistic polychaete Hediste diversicolor, a common prey species for birds, was found to fully colonise a heavily disturbed area within 6 months (see Mazik & Smyth, 2013)."

Natural England acknowledged that the extent of the potential impact area would be very small relative to the size of the SAC and the SPA. Also, given the programme for installation, it is very likely that the whole area would not be impacted at the same time. The cable installation methods would also not completely remove invertebrates from the mudflat, although it was likely that mortality would occur.

E.5.7 Decision
Natural England advised that installation of the export cable through the mud and sand flats, which were a qualifying feature of the SAC and a supporting feature of the SPA, would not have an adverse effect on integrity of the SAC, because, beyond reasonable scientific doubt in respect of the SAC:

a) The area of impact would be small relative to the SAC;
b) The physical habitat will recover;

[19] Weblink: (http://publications.naturalengland.org.uk/publication/5091106)

c) There will be no loss of habitat, allowing invertebrate infauna to recolonize and recover.

And in respect of the SPA:

a) The area of impact would be small relative to Middleton Sands and the wider SPA ;
b) The physical habitat will recover;
c) The invertebrates will suffer some mortality, but will recover, (but to uncertain timescales).

Essentially this advice formed the basis of the Secretary of State's conclusions on the appropriate assessment and integrity test for the SAC and SPA.

An Order for development consent was made.

E.6 Hinkley Point C nuclear power station

E.6.1 Description of development

3,260MW European pressurised reactor nuclear power station.

E.6.2 Location

Hinkley Point, Somerset.

E.6.3 Date of decision

19th March 2013.

E.6.4 Decision maker

Secretary of State DECC.

E.6.5 Area of designated site and relevant qualifying features

One aspect of the Habitats Regulations Assessment for the Hinkley Point C power station is relevant to this report. It related to the Severn Estuary SAC (though equivalent assessments were made in respect of the Ramsar site and the SPA). The aspect related to the following qualifying features: estuaries (which according to the standard data form, extended to 99.95% of the SAC which is equivalent to some 73,678ha) and *Sabellaria* reef (which extended to 2% of the SAC which is equivalent to 1,474ha).

E.6.6 The nature and duration of effects associated with the project

The assessment considered the effects from a temporary jetty leading to habitat loss and modification which was described at paragraph 2.11 of the Habitats Regulations Assessment as follows:

"The temporary jetty comprises the creation of a harbour made up of a jetty, a berthing pocket, a jetty head and some terrestrial works. The offshore works would extend into Bridgewater Bay. The construction of the jetty is estimated to take approximately 12-16 months and it would be in operation for a period of eight years, before being decommissioned. Decommissioning is estimated to take 12 months, plus a further 24 months for site reinstatement."

Furthermore, effects were considered from the temporary use of an area of the foreshore for the storage of construction materials and machinery, paragraph 6.44 reads:

"The construction works for the sea wall require a total width of 30 metres from the top of the foreshore. This area is necessary for the storage of the rock to build the toe of the wall and for machinery to work."

E.6.7 Decision

Paragraph 6.44 of the Habitats Regulations Assessment continued (emphasis added), in respect of these temporary effects:

"An area on the foreshore is proposed to be used for the berthing of barges and unloading of rock material for construction. The inter-tidal 'rocky shore' habitat is part of the estuaries feature as it supports marine fauna, particularly Corallina (red algae). The loss of this rocky shore habitat was assessed in the applicant's HRA by mapping the intertidal habitats in the construction area and assessing their level of recoverability. All were found to have a medium to high recoverability, with full recovery expected within 5-10 years. Impacts from the barge berthing area and construction area have been assessed by EA as a percentage of the whole rocky shore SAC/Ramsar feature of the Severn Estuary. The total area impacted equated to 0.29% and the impacts to the rocky shore were, therefore, considered to be insignificant."

Essentially therefore, the temporary nature of the related effects, together with the confidence in recoverability, were material considerations in the decision.

An Order for development consent was made.

E.7 Kentish Flats offshore wind farm

E.7.1 Description of development

51MW, offshore wind farm extending the existing Kentish Flats offshore wind farm by a further 17 turbines up to 145m to blade tip over an area of about 380ha.

E.7.2 Location

The Thames Estuary, 8.6km north of Herne Bay, Kent and 9.5km north of Whitstable, Kent adjoining the existing Kentish Flats offshore wind farm and entirely within English territorial waters. The existing and, at the time of examination, almost completed London Array Offshore Wind Farm phase 1 was located 25km to the north of Kentish Flats. Other offshore activities in the area included marine aggregate extraction, dredging, commercial shipping, and fisheries.

E.7.3 Date of decision

16th February 2013.

E.7.4 Decision maker

Secretary of State DECC.

E.7.5 Area of designated site and relevant qualifying features

The qualifying features were the red throated diver population for which the Outer Thames Estuary SPA had been classified. The Outer Thames Estuary SPA is 379,268ha.

E.7.6 The nature and duration of effects associated with the project

The effect which is of relevance to this report is the disturbance associated with cable laying activities.

E.7.7 Decision

When considering how to take account of effects from other windfarms, as part of the in combination assessment, the Habitats Regulations Assessment referred to the potential effects from the East Anglia One. It stated at paragraph 4.28 that the Secretary of State *"is satisfied that disturbance and displacement within the SPA as a result of the East Anglia One cable laying activity will be temporary and will be, at least partially, offset by a reduction*

in commercial vessels during this period and so he is content to screen this activity out of further consideration in the AA".

In taking this position, the temporary nature of effects from cable laying enabled the Secretary of State to exclude those effects from the wider in combination assessment.

An Order for development consent was made.

E.8 Gilwerne to Hafodyrynys gas pipeline

E.8.1 Description of development

The installation of a 25 km long and 600mm diameter, gas pipeline from the installation at Gilwern to the installation at Hafodyrynys, in order to improve gas supplies to southern Wales.

E.8.2 Location

Gilwern to Hafordyrynys, Fynwy and Monmouthshire, Wales.

E.8.3 Date of decision

3rd July 2002.

E.8.4 Decision maker

The Secretary of State for Trade and Industry.

E.8.5 Area of designated site and relevant qualifying features

The Usk Bat Sites SAC is 1,686.4ha, of which 350ha is European dry heath, a qualifying feature of the SAC. It was a candidate SAC at the time when the project was being considered by the Secretary of State.

E.8.6 The nature and duration of effects associated with the project

The appropriate assessment detailed impacts on the European dry heath in terms of direct removal of 2.5ha of this habitat type, and a potential for disturbance to the caves or their lesser horseshoe bats.

One hectare of the affected area was to be subject to turfing, i.e. the heathland turfs would be removed, the pipeline laid and the turfs replaced with recovery anticipated in 1-2 years. The Secretary of State determined that this would not represent an adverse effect on integrity. The remaining 1.5ha could not be turfed and the top soil was to be stripped, thus irreparably damaging the existing heathland vegetation and requiring heathland recreation by new planting and seeding. The recovery for this area was expected to take 10-12 years and there was uncertainty regarding the success of the proposed habitat recreation.

E.8.7 Decision

In light of the appropriate assessment, it was concluded that the proposal would adversely affect the integrity of the cSAC and the Secretary of State therefore considered whether there were any alternative solutions, and concluded that there were none. The appropriate assessment stated that conditions were "very likely" to mitigate for the negative effects, but maintained that there was still a possibility that the pipeline would still have an adverse effect on site integrity. Page 3 of the decision letter:

"*The DTI is not of the view that the area involved here should be construed as de minimis*"

"...*It is reasonable to consider the 1 to 2 years that the 1 ha turfed area is likely to take to restore its full species composition (i.e. restoration in area and quality), as de minimis. This would not therefore represent an adverse effect on the integrity of the cSAC. In contrast, the*

DTI is of the view that the 10-12 year-long effect on the 1.5 ha of cSAC habitat which will not be turfed cannot be considered de minimis, and thus should be considered as an adverse effect on the integrity of the site".

The mitigation methods proposed for the 1.5 ha of soil stripped heath included the propagation of dwarf shrubs for transplanting into the affected area. This method was experimental and therefore no reference could be made to previous applications to verify how successful the proposed method might be. Thus it is likely that the lack of certainty of recovery of the stripped 1.5ha was a factor in the Secretary of State's decision, as well as the longevity of the adverse effect.

An effect lasting 1-2 years, with good confidence in recovery was acceptable; whereas an effect lasting 10-12 years, where recovery was uncertain was not.

The pipeline was consented via the derogation procedures of Article 6(4).