The appropriate assessment process and the concept of ecological ‘integrity’ in EU nature conservation law

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When one considers the central place of the notion of ‘integrity’ to the entire field of EU nature conservation law, as the key substantive standard of legal protection afforded to sites designated under both the 1979 Wild Birds Directive1 and the 1992 Habitats Directive, it seems remarkable that it should have remained legislatively undefined and, further, that it should have taken so long to receive judicial elaboration. Recent pronouncements on the concept of integrity by the Court of Justice of the European Union (CJEU) suggest that the Court has taken a very robust view of the standard of ecological protection stipulated thereby – much to the delight of environmentalists.

However, in its reasoning the Court appears to have used a curious combination of modes of legislative interpretation in order to justify what essentially amounts to a judicially creative policy decision, whilst ignoring established scientific thinking on ecological and ecosystem integrity. By imposing a very strict and inflexible understanding of ecological integrity, which is not necessarily supported by current scientific thinking, the Court’s approach may fail to win legitimacy and acceptance among EU Member States, perhaps leading them to avail more readily of the available legislative exceptions to their duty to protect such sites, or even to resort to regressive reform of the current legislative regime.

Centrality of the ecological ‘integrity’ concept

It has long been understood that the main thrust of the corpus of EU nature conservation law, which is quite neatly confined to the 1979 Wild Birds and 1992 Habitats Directives,2 pursues an ‘enclave’ strategy, requiring the active designation of areas enjoying special nature conservation status, within which special rules of environmental protection are to apply.3 Notwithstanding the inclusion of provisions on the protection of species beyond designated sites4 and the increasingly rigorous application of these provisions,5 the fact remains that the key means of legal protection of habitats and species in EU law is that of preventing national competent authorities from permitting plans or projects which might adversely affect sites of high ecological value designated under the 1979 and 1992 directives. To this end, Article 6(3) of the Habitats Directive is the key provision, requiring that an ‘appropriate assessment’ must be carried out in respect of any plan or project which might significantly affect such a site. Article 6(3) provides in full:

Any plan or project …, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned.

Therefore, despite the fact that Article 6(4) provides for exceptions to the rule in Article 6(3), whereby plans or projects which have been found to present a risk to the integrity of the site may be permitted on grounds of ‘imperative reasons of overriding public importance’, the appropriate assessment required under Article 6(3) represents the single most important legal mechanism for the protection of European habitats, and thus also species.6

Unlike EIA or SEA, an appropriate assessment of the effects of a plan or project on a Natura 2000 site is determinative of the outcome of the permitting process and this...
assessment must make a determination on the basis of a single substantive standard, i.e. that of the maintenance of ‘the integrity of the site concerned’. Thus, the scientific and legal nature of the ‘integrity’ standard is of absolutely central concern to EU nature conservation law.

The appropriate assessment process

As regards process, official European Commission guidance on the steps required for the conduct of an appropriate assessment9 sets out the precise nature of each step and the sequential order for their performance in considerable detail. In essence, it stipulates four distinct stages:

- stage 1: Screening – to determine that there will be no significant effects on a Natura 2000 site or
- stage 2: Appropriate assessment – to determine that there will be no adverse effects on the integrity of a Natura 2000 site or
- stage 3: Assessment of alternative solutions – to determine that there are no alternatives to the project or plan that is likely to have adverse effects on the integrity of a Natura 2000 site or
- stage 4: Assessment of compensatory measures – to determine that there are compensation measures which maintain or enhance the overall coherence of Natura 2000.

Screening

Stage 1 requires a description of the project in question and of other projects that in combination have the potential for having significant effects on the Natura 2000 site, as well as identification of these potential effects and an assessment of their significance. The description of the project should correspond to a number of project parameters10 and should include a cumulative assessment identifying, inter alia, all possible sources of effects from the project in question together with existing sources and other proposed projects and the boundaries for the examination of cumulative effects.11 At the screening stage, potential impacts should be identified having regard to a range of sources, such as the Natura 2000 standard data

form for the site in question, land use and other relevant existing plans, existing data on key species and environmental statements for similar projects elsewhere.12 The significance of such impacts is to be assessed through the use of key significance indicators, including the percentage of loss of habitat area, the level, duration or permanence of habitat fragmentation, the duration or permanence of disturbance to habitats, and relative change in water resource and quality.13

Helpful judicial statements exist on the sequential ordering and intensity of the various assessment processes required under Article 6(3). In the *Waddensee* case, the European Court of Justice (ECJ) explained that

> … the first sentence of Article 6(3) of the Habitats Directive subordinates the requirement for an appropriate assessment of the implications of a plan or project to the condition that there be a probability or a risk that the latter will have significant effects on the site concerned.14

Therefore a second, more detailed assessment is required where the preliminary assessment identifies a risk of significant effects having regard to the precautionary principle, ‘by reference to which the Habitats Directive must be interpreted’.15 Indeed, the Court found that ‘such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned’, which in turn ‘implies that in case of doubt as to the absence of significant effects such an assessment must be carried out’.16 Thus, ‘[t]he case law of the ECJ makes it clear that the trigger for an appropriate assessment is a very light one, and the mere probability or a risk that a plan or project might have a significant effect is sufficient to make an “appropriate assessment” necessary’.17

Appropriate assessment

If the screening stage concludes that there will be significant effects on a Natura 2000 site, stage 2 requires that an appropriate assessment be conducted. It is quite clear from

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10 The 2002 Commission Guidance (n 9) at 18 provides an illustrative list of such parameters, including: size, scale, area, land-take; resource requirements (water abstraction etc); emissions and wastes (disposal to land, water or air); duration of construction, operation, decommissioning etc; distance from Natura 2000 site or key features of the site etc.
11 ibid para 19.
12 ibid 20.
13 ibid.
15 ibid para 44. See further for example J Jans and H B Velder European Environmental Law (3rd edn Europa Press Groningen 2008), who note at 460 that: ‘this provision involves a two-stage assessment of the environmental impact. If it cannot be excluded, on the basis of objective information, that the plan or project will have a significant effect on that site, either individually or in combination with other plans or projects, a second in-depth assessment is required’.
16 ibid.
17 G Simmons ‘Habitats Directive and appropriate assessment’ (2010) 17 Irish Planning and Environmental Law Journal 4 at 7. See also Waddensee (n 14) paras 41 and 44.
the guidance issued by the Commission on the implementation of Article 6(3) that this actual assessment of the impact of the plan or project on the integrity of the site involves a structured process consisting of four key steps, including (i) the gathering of all relevant information, (ii) the prediction of likely impacts of the project, (iii) assessment of whether these impacts will have adverse effects on the integrity of the site having regard to its conservation objectives and status, and (iv) assessment of proposed mitigation measures intended to counteract the adverse effects the project is likely to cause.18

The information to be gathered and considered will involve a range of information about the project including, for example, the results of any EIA or SEA process, and a range of information about the site, such as the conservation objectives of the site, the conservation status of the site (favourable or otherwise), the key attributes of any Annex I habitats or Annex II species on the site, and the key structural and functional relationships that create and maintain the site’s integrity.19 The EU Commission Guidance also lists among the information essential for completion of the Article 6(3) appropriate assessment “[t]he characteristics of existing, proposed or other approved projects or plans which may cause interactive or cumulative impacts with the project being assessed and which may affect the site”.20

The EU Commission Guidance sets out in some detail the range of ‘impact prediction methods’ which might be employed. These impact prediction methods include:

- direct measurements: to identify proportionate losses from species’ populations, habitats and communities
- flow charts, networks and systems diagrams: to identify chains of impacts resulting from direct impacts and indirect impacts, illustrating inter-relationships and process pathways
- quantitative predictive models: to provide mathematically derived predictions based on data (including trend analysis, scenarios, analogies which transfer information from other relevant locations etc) and assumptions about the force and direction of impacts
- geographical information systems (GIS): to produce models of spatial relationships (such as constraint overlays) and to map sensitive areas and locations of habitat loss
- information from previous similar projects: especially if quantitative predictions were made initially and have been monitored in operation
- expert opinion and judgment: derived from previous experience and consultations.21

More generally, the Guidance stresses that “[p]redicting impacts should be done within a structured and systemic framework and completed as objectively as possible”.22 It should be remembered that the ‘existing baseline conditions of the site’ is expressly included among the information required under the EU Commission Guidance in order to complete an appropriate assessment.23 Indeed, the Guidance clearly states that “[w]here [such] information is not known or not available, further investigations will be necessary”.24

Assessment of whether there will be adverse effects on the integrity of the site as defined by its conservation objectives and conservation status must apply the precautionary principle and involves completion of the ‘integrity of site checklist’.25 As regards the site’s conservation objectives, the checklist asks whether the project delays or interrupts progress towards achieving the conservation objectives of the site, whether it disrupts key factors which help to maintain the favourable conditions of the site, and whether it interferes with the balance, distribution and density of key species that are indicators of the favourable condition of the site.26 It also asks whether the project impacts upon a range of other indicators, including vital aspects of the structure and functioning of the site, the area of key habitats, the diversity of the site, the population of and balance between key species, habitat fragmentation, and loss or reduction of key ecological features.27 It is quite clear, therefore, that the Commission envisaged that determination of adverse effects on the integrity of a site would involve a highly technical and scientifically rigorous analysis based on the best available scientific methods and understanding of ecosystem dynamics.

The assessment of mitigation measures involves, initially,
listing each of the measures to be introduced and explaining how they will avoid or reduce the adverse impacts on the site. Then, in respect of each mitigation measure, it is necessary to provide a timescale of when it will be implemented and to provide evidence of how it will be implemented and by whom, of the degree of confidence in its likely success, and of how it will be monitored and rectified in the event of failure.31 Mitigation measures should aim for the top of the mitigation hierarchy.32 There would appear to be potential for confusing mitigation and compensatory measures, the latter being envisaged under stage 4: ‘Assessment where no alternative solutions exist and where adverse impacts remain’ of the Article 6(3) assessment process as set out under the EU Commission Guidance.33 However, Advocate General Sharpston’s recent Opinion in the T.C. Briels case would appear now to have made it abundantly clear that compensation may not be regarded as a measure which mitigates the impact of a plan or project of the overall integrity of the site as envisaged under stage 2: ‘Appropriate assessment’.34 Instead, such compensatory measures must be considered under Article 6(4), whereby the project may be carried out provided that all the conditions and requirements laid down in Article 6(4) are fulfilled or observed.35 Clearly, this position is more in keeping with the requirement for sequential coherence and logical integrity of the processes employed in the study, bearing in mind the Guidance’s stipulation that ‘[p]redicting impacts should be done within a structured and systemic framework’.36

**Alternative solutions and compensatory measures**

It is only where the stage 2 appropriate assessment concludes that the project will have adverse impacts on the integrity of the Natura 2000 site, which cannot be avoided or reduced through mitigation measures, that stage 3 is required, involving an examination of alternative ways of implementing the project which would avoid such impacts.37 Similarly, the stage 4 assessment of compensatory measures is only required where stage 3 concludes that no alternative solutions to the proposed project exist and that adverse impacts from the project remain.38 In such cases it is necessary for the Member State authorities to establish, under Article 6(4), that there are imperative reasons of overriding public importance for proceeding with the project. In the case of sites that host priority habitats and species, it is only possible to proceed on the basis of human health and safety considerations or environmental benefits flowing from the project.

**Judicial deliberation on appropriate assessment**

Although the key issue in any Article 6(3) appropriate assessment, and for some time the one most in need of further judicial clarification, is that of whether a project ‘adversely affects the integrity of the site concerned’,39 such clarification had not come along until very recently.40 The European Court of Justice (ECJ) has, however, provided some judicial clarification as to the boundaries of the integrity standard and the procedural standards required for an adequate stage 2: ‘Appropriate assessment’, and leading commentators have observed that ‘the Court has put the bar quite high indeed’.41 In Waldén, for example, the ECJ stated quite categorically that:

> The competent national authorities, taking account of the appropriate assessment of the implications … are to authorize such an activity only if they have made certain that it will not adversely affect the integrity of that site. This is the case where no reasonable scientific doubt remains as to the absence of such effects.42

In *Commission v Portugal*, the Court, having regard to the finding of the environmental impact study that: ‘the project in question has a “significantly high” overall impact and a “high negative impact” on the avifauna present in the Castro verde SPA’, and found that: ‘[t]he inevitable conclusion is that, when authorizing the planned route of the A motorway, the Portuguese authorities were not entitled to take the view that it would have no adverse effects on the SPA’s integrity’.43 In this case, the Court reminded the Portuguese authorities that they had other options under the Habitats Directive for authorising the project, pointing out that: ‘[i]n those circumstances, the Portuguese
authorities had the choice of either refusing authorisation for the project or of authorising it under Article 6(4) of the Habitats Directive, provided that the conditions laid down therein were satisfied.’ This suggests that the availability of the exceptional power to authorise under Article 6(4) might suggest a very high standard of protection under Article 6(3).

In its important 2007 judgment in Commission v Italy, the ECJ evaluated whether a 2000 environmental impact study and a further 2002 report were adequate in combination to be considered appropriate assessments within the meaning of Article 6(3). In reaching the ‘inescapable conclusion’ that the earlier study did not constitute an appropriate assessment on which the national authorities could rely for granting authorisation for the disputed works pursuant to Article 6(3) of Directive 92/43, the Court emphasised ‘the summary and selective nature of the examination of the environmental repercussions’ of the proposed works, the fact that the ‘study itself mentions a large number of matters which were not taken into account’ and thus recommends ‘additional morphological and environmental analyses and a new examination of the impact of the works … on the situation of certain protected species’ and, further, that ‘the study takes the view that the carrying out of the proposed works … must comply with a large number of conditions and protection requirements’.

As regards the later report, the Court reached a similar conclusion, and complained that it ‘does not contain an exhaustive list of the wild birds present in the area’ for which the SPA at issue had been designated, contains numerous findings that are preliminary in nature and it lacks definitive conclusions and, further, stresses ‘the importance of assessments to be carried out progressively, in particular on the basis of knowledge and details likely to come to light during the process of implementation of the project’. Indeed, the Court provides a very clear and concise indication of the deficiencies in an assessment (or series of assessments) which would render it inadequate for the purposes of Article 6(3) of the Habitats Directive:

It follows from all the foregoing that both the study of 2000 and the report of 2002 have gaps and lack complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the SPA concerned.

Judicial understanding of site ‘integrity’: the Sweetman case

Despite the availability of a range of technical guidance on the implementation of Article 6 of the Habitats Directive at both EU and national levels, and the judicial guidance outlined immediately above, considerable uncertainty has persisted, not least about the precise meaning of the concept of the ‘integrity’ of a protected site. For example, academic commentators identified ‘sources of uncertainty encountered in the significance decision procedure as part of the assessment of article 6 Habitats Directive’ and further outlined ‘how they affect the use of knowledge during the three steps of the assessment process, i.e. identification of the site conservation objectives, predicting the impact of the planned activity and assessing the significance of any effects on the Natura 2000 site’.

Another leading authority on environmental and ecological assessment has noted that: ‘various guidance documents have been published, but there is still considerable debate about just what methodology should be used, how to test impacts on site “integrity”, what avoidance and mitigation measures are adequate, who should be responsible for these measures, etc.’

Questions regarding the precise meaning and conservation implications of the concept of ecological ‘integrity’ as included under Article 6(3) of the Habitats Directive eventually came before the CJEU in the Sweetman case, some 20 years after the adoption of the directive. This case concerned a proposed road project in Ireland, the N6 Galway Outer Bypass, which would have led to the permanent loss of 1.47 hectares of limestone pavement, an

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50 ibid para 69 (emphasis added).
Annex I priority habitat type, within the Lough Corrib candidate Special Area of Conservation (SAC) covering 25,000 hectares. The area to be affected was located within a distinct sub-area of the site, containing 85 hectares of limestone pavement out of a total 270 hectares of this particular geological feature in the candidate SAC, which was one of six priority habitat types out of a total of 14 Annex I Habitats hosted by the site and recognised as ecologically important in terms of the SAC’s conservation objectives.54

In judicial review proceedings challenging the decision of An Bord Pleanála (the Planning Board) to grant development consent to the project pursuant to the Roads Acts, the Irish High Court rejected the applicant’s argument that the fact that a proposed project would have a ‘localised severe impact’ on a Natura 2000 site prevented the permitting authority from nevertheless concluding that it would not adversely affect the integrity of the site.55 While the Court fully understood the Court determined that any permanent loss of the habitat type for which the site had been designated would ‘adversely affect the integrity of the site’ for the purposes of Article 6(3). Advocate General Sharpston had unequivocally concluded that the

The High Court also explained that the focus under Article 6(3) ought to be on the integrity of the specific site, rather than the general status within the territory of the Member State of the habitat types or species that that site hosts.56 This decision was appealed to the Irish Supreme Court which, in turn, referred the question of ‘integrity’ under Article 6(3) to the CJEU – the first time that the Irish courts have done so in a case involving the interpretation of EU environmental law. The Supreme Court requested a preliminary ruling in respect of three closely interrelated questions, which centred on the ‘the criteria in law to be applied by a competent authority to an assessment of the likelihood of a plan or project … having “an adverse effect on the integrity of the site”’, and on the related ‘application of the precautionary principle … [and] … its consequences’.57

Following the very robust Opinion of the Advocate General, the Court determined that any permanent loss of the habitat type for which the site had been designated must ‘adversely affect the integrity of the site’ for the purposes of Article 6(3). Advocate General Sharpston had unequivocally concluded that the

... 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.58

However, the reasoning employed by the Court (and by the Advocate General) in arriving at this uncompromising and direct conclusion requires further examination, as do the possible implications of their interpretation of the concept of ecological ‘integrity’ for the effective conservation of protected sites.

Teleological legislative interpretation

As regards its reasoning, the Court characteristically employed a teleological interpretation59 of the relevant provisions of the Habitats Directive, agreeing with the
Advocate General that Article 6(3) of the directive and the scope of the expression ‘adversely affect the integrity of the site’, ‘must be construed as a coherent whole in the light of the conservation objectives pursued by the directive’ and, furthermore, that these provisions ‘impose upon the Member States a series of specific obligations and procedures designed … to maintain, or as the case may be, restore, at a favourable conservation status natural habitats and, in particular, special areas of conservation’. Thus, pursuant to this teleological mode of legislative interpretation, the Court has, like the Advocate General before it, closely linked the notion of site ‘integrity’ to that of ‘favourable conservation status’, clearly finding that ‘it should be inferred that in order for the integrity of a site as a natural habitat not to be adversely affected … the site needs to be preserved at a favourable conservation status’.63

The Court goes on to cite with approval the Advocate General’s observation that ‘this entails … the lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site in the list of SCIs’.64 The Court confirmed, therefore, that for the purposes of Article 6(3), ‘the conservation objective thus corresponds to maintenance at a favourable conservation status of that site’s constitutive characteristics, namely the presence of limestone pavement’.65 Indeed, the Court found that this requirement for Member States to ensure such lasting preservation of key ecological characteristics of a designated site ‘applies all the more’ in projects such as the present one, where the natural habitat affected ‘is among the priority natural habitat types’.66 The Court therefore concluded emphatically that, for the purposes of Article 6(3), a plan or project likely to impact on a designated 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. The precautionary principle should be applied for the purposes of that appraisal’.67

It is clear, therefore, that the Court has adopted a very strict understanding of the requirement to maintain the ecological integrity of a protected site under Article 6(3), at least as regards likely permanent or long lasting loss or damage of a priority habitat type, the preservation of which was intended by designation of that site. The issue of permanence or long lasting effect is central and the Advocate General distinguished from the situation arising in the present case “[a] plan or project [that] may involve some strictly temporary loss of amenity which is capable of being fully undone” and “plans or projects whose effect on the site will lie between those two extremes”.68 While she declined to pronounce on the latter, the Advocate General stated plainly in relation to the former that “[f]or provida 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”.69 It is also unclear whether and when possible loss or damage, even if permanent or long lasting, to a non-priority habitat type afforded protection by means of the designation

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63 Judgment (n 3) para 36.
64 See in particular AG Opinion (n 3) para 56, which advises that: “The constitutive characteristics of the site that will be relevant are those in respect of which the site was designated and their associated conservation objectives.”
65 Judgment (n 3) para 39. It should be noted that Article 2 of the Habitats Directive stipulates, as a core aim of the directive that: “Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest.”
66 ibid. The Advocate General had no doubt, at AG Opinion (n 3) para 56, that: “In the present case, the designation was made, at least in part, because of the presence of limestone pavement on the site – a natural resource in danger of disappearance that, once destroyed, cannot be replaced and which is therefore essential to conserve.”
67 Judgment (n 3) para 45.
68 Judgment (n 3) para 43. In support of this conclusion, the Court points out that Article 1(d) of the Habitats Directive defines priority natural habitat types as “natural habitat types in danger of disappearance” for whose conservation the European Union has “particular responsibility”.
69 Judgment (n 3) para 48. The Advocate General’s conclusion is arguably even more strident, stating at AG Opinion (n 3) para 76, that: “in order to establish whether a plan or project to which Article 1(k) of the Directive applies has an adverse effect on the integrity of a site, it is necessary to determine whether that plan or project will have a negative effect on the constitutive elements of the site concerned, having regard to the reasons for which the site was designated and their associated conservation objectives. 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.”
70 AG Opinion (n 3) para 59-61.
71 According to the Advocate General at AG Opinion para 61: “I consider that it would be prudent to leave this point to be decided in a later case.”
72 AG Opinion (n 3) para 59 (original emphasis).
of a site will amount to an adverse effect on the integrity of that site. Perhaps the Court’s judgment (and the Advocate General’s Opinion) might have shed more light on the application of the ‘integrity’ standard in such commonly occurring ‘grey’ areas had either attempted to address the role and relative value of the various indicators of ecological integrity based on current scientific knowledge and recognised in current EU guidance and practice. When one considers that the Court has reaffirmed that ‘the Habitats Directive has the aim that the Member States take appropriate protective measures to preserve the ecological characteristics of sites which host natural habitat types’, it seems remarkable that it had absolutely no regard whatsoever to the ecological criteria set out in detail in the ‘integrity of site checklist’ provided in the Commission’s 2002 methodological guidance on the implementation of Article 6.73

Precautionary principle

Both the Court and the Advocate General base this strict interpretation of the requirement to maintain a protected site’s ecological ‘integrity’, at least in part, on the application of the precautionary principle.74 Whilst the precautionary principle is not expressly mentioned anywhere in the text of or recitals to the Habitats Directive,75 the Court had already enthusiastically established in the Waddenzee case that Article 6(3) of the directive integrates the precautionary principle,76 and now appears to regard the principle as indispensable to that provision’s effective implementation.77 This would appear to be an example of the Court’s use of the ‘eft utile doctrine in the interpretation of Article 6(3), described by Fennelly as the ‘constant companion of the chosen [teleological] method’, which provides that ‘once the purpose of a provision is clearly identified, its detailed terms will be interpreted so “as to ensure that the provision retains its effectiveness”’.78 Although he concedes that it might appear somewhat ‘shocking’ to the common lawyer, that ‘the Court either reads in necessary provisions …, or bends or ignores literal meanings … [or] … fills in lacunae which it identifies in legislative or even EC Treaty provisions’,79 Fennelly stresses the Court’s use of the eft utile doctrine in creating a ‘Community of law’ by extending it beyond the merely economic objectives of the early EU Treaties by, for example, guaranteeing rights to individuals.80 Thus, such reliance on the precautionary principle in order to justify this very strict interpretation of the standard of ‘integrity’ as set out under Article 6(3) might be regarded as an attempt by the Court to contribute to the ongoing development of an integrated and coherent corpus of EU environmental rules and standards, even though the Court has long taken the position that the guiding principles of EU environmental law-making now set down in Article 191 of the Treaty on the Functioning of the European Union are severely limited as grounds for the review of EU environmental measures, owing to their inherent complexity and normative uncertainty.81

Looked at from another viewpoint, the Court is employing a particular ‘contextual’ variant of the teleological approach, whereby it interprets a provision of EU law by considering not only its wording, but also the context in which it occurs and the objects of the rules of which it is a part.82 From the particular perspective of the environmental lawyer, the Court’s reasoning provides an example of the precautionary principle performing its

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73 Judgment (n 3) para 18.
74 Commission Guidance (n 9) paras 28–29.
75 See for example Judgment (n 1) para 41 and AG Opinion (n 3) paras 76, 78.
76 Which is oddly surprising, considering that the reference to the ‘precautionary principle’ now contained in Article 191(2) of the Treaty on the Functioning of the European Union was first inserted into the framework of the EU founding treaties by means of the amendments to the Treaty of Rome introduced by the Maastricht Treaty which, although signed in February 1992, three months before the adoption of the Habitats Directive, only entered into force in November 1993.
77 See in particular Case C–127/02 Waddenzee (n 14) paras 44 and 48. Indeed, the Advocate General maintains, at AG Opinion (n 3) para 79, that because ‘the precautionary principle has been integrated into Article 6(3), it follows … that there is no interpretational gap in the scheme of that article to be filled by the application of that principle’.
78 See Judgment (n 3) para 41, where the Court explains that ‘the authorisation criterion laid down in the second sentence of Article 6(3) of the Habitats Directive integrates the precautionary principle and makes it possible to prevent in an effective manner adverse effects on the integrity of protected sites as a result of the plans or projects being considered’.
79 Fennelly (n 61) at 674, quoting from Case 9/70 Grad v Finanzamt Sienna [1970] ECR 825 at 837 para 5. Indeed, Fennelly further describes the doctrine as: ‘A principal corollary, developed early on, to the teleological method is the doctrine of “effectiveness”, insurmountably called by its French name, “eft utile”’.
80 ibid.
81 ibid 676.
82 In Case C–341/95 Benat v Siagy Hi-Tech Itl [1999] ECR 1–4155, which involved a challenge to the validity of Ozone Regulation 3091/94, the Court, while accepting that the objectives, principles and criteria of the former Article 110b (now Article 191 TFEU) must be respected by the Community legislature in implementing environmental policy, nevertheless found, at para 34–35, that ‘in view of the need to strike a balance between certain of the objectives and principles mentioned in Article 110b and of the complexity of the implementation of those criteria, review by the Court must necessarily be limited to the question whether the Council, by adopting the Regulation, committed a manifest error of appraisal regarding the conditions for the application of Article 110b of the Treaty’.
‘guidance function’, as a guiding principle of EU environmental law, whereby ‘European law may – and indeed must – be interpreted in the light of the environmental objectives of the TFEU, even with respect to areas outside the environmental field’. 84

However, the lack of clarity over the normative nature and functioning of the precautionary principle, alluded to by the Court in the Renten case85 as regards the principle’s utility as a ground for judicial review of a legislative measure, continues to be a problem where the principle performs its ‘guidance function’ to aid legislative interpretation. For example, commentators have long understood the precautionary principle as ‘a tool for decision-making in a situation of scientific uncertainty’, which effectively ‘changes the role of scientific data’. 86 For the principle’s application, therefore, there should exist a state of scientific uncertainty.87 The Advocate General has acknowledged this fact stating, in relation to screening for environmental objectives of the TFEU, even with respect to areas outside the environmental field’. 88

That principle applies where there is uncertainty as to the existence or extent of risk. 89

The Court has also expressly linked the application of the precautionary principle with situations ‘where uncertainty remains as to the absence of adverse effects on the integrity of the site’. 90 Such an understanding of the applicability of the precautionary principle accords with the official position expressed in the Commission’s 2000 Communication, which quite clearly advises that: ‘application of the precautionary principle is part of risk management, when scientific uncertainty precludes a full assessment of the risk and when decision-makers consider that the chosen level of environmental protection or of human, animal and plant health may be in jeopardy’. 91

The difficulty in the present case is that it is not apparent that there was any real ‘uncertainty as to the existence or extent of risk’, in an ecological sense. It seems quite clear that a loss of 1.47 hectares of limestone pavement out of an area of 85 hectares in the immediate vicinity and a total of 270 hectares in the protected site would not impact on ecosystem structure, composition or function – the key issue on which the Court might usefully have focused in making a determination about site ‘integrity’. Indeed, the Advocate General also described the application of the precautionary principle as ‘a procedural principle, in that it describes the approach to be adopted by the decision-maker and does not demand a particular result’. 92 However, this statement is very difficult to reconcile with the Court’s conclusion that ‘a less stringent authorisation criterion’ than that based on the precautionary principle ‘cannot ensure as effectively the fulfilment of the objective of site protection intended under that provision’. 93 The Court clearly appears, therefore, to have regarded the precautionary principle as capable of informing the substantive standard of protection afforded to a protected site under Article 6(1). Closely linked to the requirement that a situation of scientific uncertainty should exist in order for the precautionary principle to apply is the fact that practically all formulations of the principle require that decision-makers take account of the best available scientific

84 See J Jans ‘Stop the integration principle?’ (2010) 33 Journal of Environmental Law 153 at 1541. Several of the guiding principles of EU environmental policy, first incorporated into the EC Treaty by means of the Single European Act and Maastricht Treaty amendments, have been applied by the ECJ as aids to the interpretation of secondary legislation on the environment. See for example Case C–1/03 Ban di Rieti [2004] ECR I–7632 Judgment (7 September 2004) paras 45, 48 and 58, where the definition of waste under the Waste Framework Directive was extended having regard to the polluter pays principle and preventive and precautionary principles. Also the precautionary principle has guided the interpretation of EU public health legislation in Joined Cases T–74, 76, 83, 85, 132, 137 & 141/09 Angeles [2002] ECR II–4945 para 183.
85 Renten v Safety Hi-Tech Ltd (n 82).
87 See for example Principle 15 of the 1992 Rio Declaration on Environment and Development http://www.unesco.org/education/refenso/pdf/RIO_E.PDF, which provides that: ‘Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation’. 88 AG Opinion (n 3) para 51 (emphasis added).
89 Judgment (n 3) para 41.
91 AG Opinion (n 3) para 78.
92 Judgment (n 3) para 41 (emphasis added), citing the Waddensea case (n 14) at 57–58. Similarly, in para 44, the Court concluded that: ‘Article 6(1) of the Habitats Directive must be interpreted as meaning that a plan or project ... 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 ... The precautionary principle should be applied for the purposes of that appraisal’. This implies that the precautionary principle should be employed to inform the determination of a scientific fact, ie permanent or lasting damage or loss of certain constitutive characteristics, thereby strongly suggesting that the principle would play rather more than a mere procedural role.
knowledge.\textsuperscript{91} The Commission guidance on the matter clearly provides that "[b]efore the precautionary principle is invoked, the scientific data relevant to the risks must first be evaluated\textsuperscript{92}" and then proceeds to elaborate on the nature of such a scientific evaluation.\textsuperscript{93} The Court reiterated that any determination regarding adverse effects on the integrity of a protected site must be made "in the light of the best scientific knowledge in the field",\textsuperscript{94} whilst also stressing the technical instruction provided under Article 1(e) of the Habitats Directive to the effect that

\begin{quote}
… the conservation status of a natural habitat is taken as ‘favourable’ when, in particular, its natural range and areas it covers within that range are stable or increasing and the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.\textsuperscript{95}
\end{quote}

It is not at all clear that the Court took account of any such technical scientific evaluation. In fact, in relation to the principle of proportionality, which is described as one of the ‘general principles of application’ which ‘[a]pply to the precautionary principle',\textsuperscript{96} the Communication goes to the trouble of expressly pointing out that ‘[t]he precautionary principle can under no circumstances be used to justify the adoption of arbitrary decisions’\textsuperscript{97}. Policy decision

The Court’s reasoning in the Sweetman case would also appear to employ elements of what the common lawyer would recognise as a policy decision,\textsuperscript{101} which can be understood as going beyond the more usual teleological purposive approach, whereby the Court may resort to ‘other criteria of interpretation, in particular the general scheme and the purpose of the regulatory system of which the provisions in question form part’.\textsuperscript{102} It can even be regarded as going beyond the judicial creativity of the eff eet oun doctrine, by means of which ‘the Court fills in lacunae which it identifies in legislative … provisions’.\textsuperscript{103} Most notably, the Advocate General argued that any interpretation of site ‘integrity’ other than the very strict one advanced in her Opinion would fail to prevent the "death by a thousand cuts" phenomenon, that is to say, cumulative habitat loss as a result of multiple, or at least a number of, lower level projects being allowed to proceed on the same site’.\textsuperscript{104}

Although she also insisted that this phenomenon has no role in determining whether the "adverse effect on the integrity of the site" test under Article 6(3) was met',\textsuperscript{105} this reassurance is not entirely convincing. For example, elsewhere she criticised the contrary view of the meaning of integrity put forward by An Bord Pleanála, the local authorities and the United Kingdom on the basis that "[i]t also fails in any way to deal with the "death by a thousand cuts" argument".\textsuperscript{106} Indeed, the Advocate General recognised that this contrary view was  "based closely on the literal wording of Article 6(3)"\textsuperscript{107} and contended that, in "determining whether the plan or project "adversely affects the integrity of the site", it would be necessary to bear in mind that that expression must mean more than "adversely affects the site".\textsuperscript{108} although the Court did not refer explicitly to this phenomenon, it tacitly supported the Advocate General’s concerns by explaining that "[a] less stringent authorisation criterion than that in question could not ensure as effectively the fulfilment of the objective of

\textsuperscript{91} See for example a seminal study conducted over 20 years ago by Ellen Hey, which concluded that the defining characteristics of the precautionary principle included, inter alia, requirements that: (i) clean production methods, best available technology and best environmental practices must be applied; and (ii) comprehensive methods of environmental and economic assessment must be used in deciding upon measures to enhance the quality of the environment. E Hey ‘The precautionary concept in environmental law and policy: institutionalizing caution’ (1995) 4 Georgetown International Environmental Law Review 303 at 311. See further McIntyre (n 86) at 236.
\textsuperscript{92} Commission Communication (n 90) at 14, para 5.1.1.
\textsuperscript{93} ibid para 5.1.2.
\textsuperscript{94} Judgment (n 3) para 67.
\textsuperscript{95} ibid para 37.
\textsuperscript{96} Commission Communication (n 90) at 18, para 6.3.
\textsuperscript{97} ibid para 6.3.1. 99 ibid at 11, para 5.1.
\textsuperscript{98} ibid at 674.
\textsuperscript{99} AG Opinion (n 3) para 67.
\textsuperscript{100} ibid footnote 78.
\textsuperscript{101} ibid para 68.
\textsuperscript{102} ibid para 74.
\textsuperscript{103} ibid para 68.
\textsuperscript{104} ibid para 71.
site protection intended under that provision'.

The particular difficulty with the ‘death by a thousand cuts’ argument is that it fails to take account of the cumulative assessment required under Article 6(3). The provision expressly stipulates that “[a]ny plan or project … likely to have a significant effect … either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site’. Ideally, the requirement that plans or projects be initially screened for their cumulative effects persists so that they must be assessed in terms of their cumulative adverse affect on site integrity. This is apparent from the Commission’s methodological guidance, which includes among the information essential for the conduct of an appropriate assessment “[t]he characteristics of existing, proposed or other approved projects or plans which may cause interactive or cumulative impacts with the project being assessed and which may affect the site’.

The Court itself expressly acknowledged that determination of whether a plan or project would not have lasting adverse effects on the integrity of a site could only be made ‘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’. Clearly, a teleological mode of interpretation, whereby ‘the provisions of Article 6 of the Habitats Directive must be construed as a coherent whole’, sought to have considered the express requirement for cumulative impact assessment under Article 6(3) as the appropriate means for addressing the risk of ‘death by a thousand cuts’, rather than judicial introduction of a disproportionately strict and unsyndic conception of the ecological integrity of a protected site.

Comparative linguistic analysis

In addition to (and closely related to) the teleological mode of interpretation employed by the Court, the Advocate General took the time to consider ‘the differing language versions of Article 6(3)’, including those in English, French, Italian, German and Dutch, in order to conclude that:

Notwithstanding these linguistic differences, it seems to me that the same point is in issue. It is the essential unity of the site that is relevant. To put it another way, the notion of ‘integrity’ must be understood as referring to the continued wholeness and soundness of the constitutive characteristics of the site concerned.

Clearly, once the Advocate General’s reasoning came to focus on such qualities as unity, wholeness and soundness, it was almost inevitable that she would determine that permanent loss of any portion, however insignificant, of a key ecological asset must contravene the requirement to maintain the site’s integrity. Although the Court did not expressly endorse the Advocate General’s linguistic reasoning, it appeared to do so implicitly by referring approvingly to paragraph 54 of her Opinion, and also by identifying as the key consideration ‘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’, without any words of qualification regarding de minimis loss of such habitat type. Whilst the Court has long employed such comparative analysis of legal provisions in different language versions, legislative interpretation based upon such linguistic, even etymological, examination may not always achieve the essential aim of all interpretation, i.e. that of divining ‘the true intention of the lawmakers’. Regarding such intention, it seems barely credible that Article 6(3), as the key provision in the directive for the preservation and conservation of protected sites, was not intended to apply having regard to modern scientific understanding of the notion of ecological or ecosystem integrity.

110 Judgment (n 3) para 41.

111 Ibid paras 32.

112 AG Opinion (n 3) para 48.

113 Judgment (n 3) para 46.

114 Ibid paras 18, 19, 27 and 28.

115 See for example Case 283/81 CILFIT v Ministry of Health [1982] ECR 2649, para 20, [1983] 1 CMLR 472 at 491, where the Court explained that ‘To begin with, it must be borne in mind that Community legislation is drafted in several languages and that the different language versions are all equally authentic. An interpretation of a provision of Community law thus involves a comparison of the different language versions’.

116 AG Opinion (n 3) para 54 (emphasis added).

117 Judgment (n 3) para 39, where the Court expressly approves of the Advocate General’s observations ‘in points 54 to 56 of her Opinion’. AG Opinion (n 3) para 54 concludes, on the basis of the Advocate General’s comparative linguistic analysis, that ‘the essential unity of the site’ and the ‘continued wholeness and soundness of the constitutive characteristics of the site’ (emphasis added) are the key factors in relation to ‘integrity’.

118 Judgment (n 3) para 46.

119 See for example Case 283/81 CILFIT v Ministry of Health [1982] ECR 2649, para 18, [1983] 1 CMLR 472 at 491, where the Court explained that ‘To begin with, it must be borne in mind that Community legislation is drafted in several languages and that the different language versions are all equally authentic. An interpretation of a provision of Community law thus involves a comparison of the different language versions’.

120 AG Opinion (n 3) para 65.

121 Consider for example the fact that the recitals to the Habitats Directive stress that: ‘the improvement of scientific and technical knowledge is essential for the implementation of this Directive’ and that: ‘it is consequently appropriate to encourage the necessary research and scientific work’.

122 ibid paras 32.

123 Commission Guidance (n 9) 26. The same document also provides, at 13, detailed guidance on the conduct of cumulative impact assessments.

124 Judgment (n 3) para 40 (emphasis added).

125 For example the Court has on occasion placed emphasis on the ambiguity of a provision, usually by reason of linguistic divergence, in order to justify a plainly purposive approach to its interpretation. See Case 80/78 Criminal Proceedings against General Voss [1980] ECR 2015 at 2024, para 7. See further Fennelly (n 61) at 664.

126 AG Opinion (n 3) para 54 (emphasis added).

127 Judgment (n 3) para 39, where the Court expressly approves of the Advocate General’s observations ‘in points 54 to 56 of her Opinion’. AG Opinion (n 3) para 54 concludes, on the basis of the Advocate General’s comparative linguistic analysis, that ‘the essential unity of the site’ and the ‘continued wholeness and soundness of the constitutive characteristics of the site’ (emphasis added) are the key factors in relation to ‘integrity’.

128 Judgment (n 3) para 46.

129 See for example Case 283/81 CILFIT v Ministry of Health [1982] ECR 2649, para 18, [1983] 1 CMLR 472 at 491, where the Court explained that ‘To begin with, it must be borne in mind that Community legislation is drafted in several languages and that the different language versions are all equally authentic. An interpretation of a provision of Community law thus involves a comparison of the different language versions’.

130 Fennelly (n 61) at 657.

131 For example the fact that the recitals to the Habitats Directive stress that: ‘the improvement of scientific and technical knowledge is essential for the implementation of this Directive’ and that: ‘it is consequently appropriate to encourage the necessary research and scientific work’.
example, it is telling that the process of designating SACs under the directive expressly requires that ‘relevant scientific information’ should be considered.\(^{122}\) Indeed, the objective of ensuring the ‘favourable conservation status’ of a natural habitat, with which the Court closely links the concept of ‘integrity’, is defined under the directive as ‘the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species within the territory of the Member State’, and is deemed to exist when:

- its natural range and areas it covers within that range are stable or increasing and
- the specific structures and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future and
- the conservation status of its typical species is favourable as defined [elsewhere in the directive].\(^{123}\)

It is quite clear, therefore, that the notion of ‘favourable conservation status’, which the Court has recognised as absolutely central to the concept of site ‘integrity’,\(^{7}\) is to be determined on the basis of hard scientific evidence, rather than the subtleties of comparative linguistic analysis. The Court itself suggested as much in the present case by concluding that competent authorities may only authorise a plan or project under Article 6(3) where ‘in the light of the best scientific knowledge in the field … [they] … are certain that the plan or project will not have lasting adverse effects on the integrity of that site’.\(^{124}\) However, neither the Court nor the Advocate General has attempted seriously to address these scientific ecological criteria which, if employed in the present case, might not have intimated an adverse effect on the integrity of the site in question.

Possible EU Member State reaction

One ought to be concerned that the adoption by the CJEU of a very strict and inflexible approach to the concept of site ‘integrity’ under Article 6(3) of the Habitats Directive, the key standard of protection afforded to protected sites in EU nature conservation law, might produce an unwelcome reaction amongst Member States. It can plausibly be argued that the Court’s interpretation of ‘integrity’, at least in respect of plans or projects which will result in any lasting loss or damage of a priority habitat type, does not have adequate regard to the best available ecological science or to the principle of proportionality, one of the fundamental administrative principles which underlie and support the legitimacy of EU law.\(^{125}\) The Court would appear to have taken a very liberal approach to legislating interpretation relying, for example, on the precautionary principle to justify a very stringent standard of environmental protection without paying careful regard to the substantive meaning of this guiding principle or to the technical requirements for its application.

One might suggest that we have been here before as regards the Court’s zealous interpretation of EU nature conservation rules. It is commonly understood that the Court’s extremely strict, and equally judicially creative, interpretation of the obligations imposed upon Member States in respect of site designation and site protection under the Wild Birds Directive\(^{126}\) directly influenced the eventual content of the Habitats Directive, especially the inclusion of the broad exception to site protection permitted under Article 6(4). According to Scott, the inclusion of Article 6(4) and the extension of Article 6 of the Habitats Directive generally to Special Protection Areas (SPAs) designated under the Wild Birds Directive marks ‘a dramatic reassertion of Member State sovereignty over “their” natural resources’\(^{127}\) and ‘a slap in the face for the European Court’.\(^{128}\)

Thus, while there is a risk that Member States might respond to very stringent application of the standard of designated site protection under the Habitats Directive by means of regressive legislative reform, it is more likely that Member State competent authorities might instead resort to relying on the Article 6(4) exception as a matter of course. To date, competent authorities have tended, owing to local political considerations, to engage constructively with the Article 6(3) appropriate assessment process, and only occasionally to resort to Article 6(4), especially in the case of plans or projects likely adversely to affect priority habitat types or species. However, if they felt that they could

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122 Article 4 stipulates that: ‘On the basis of the criteria set out in Annex III (Stage I) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the site hosts’ (emphasis added).

123 Article 1(e).

124 Judgment (n 3) para 40 (emphasis added).


127 supra (n 5) at 115.

128 ibid 112.
call into question the legitimacy of the 'integrity' standard of protection, or of the Court’s interpretation of this standard, they may be more ready to go through the motions of conducting an appropriate assessment, whilst all the time preparing to proceed on the basis of Article 6(4). If this were to occur, considerably less effort may be expended in the course of the appropriate assessment process on exploring effective mitigation of ecological impacts in order to meet a scientifically sound, proportionate and 'achievable' integrity standard – a clear environmental benefit of meaningful engagement with Article 6(3). It has long been apparent that, in the use of the Article 6(4) exception, generally, economic development prevails over conservation, and cases where the development of a project was stopped because of the existence of a habitat or a threatened species, are extremely rare in the Community. This fact was expressly recognised by the Advocate General, who noted that 'the requirements laid down under Article 6(4) ... are not insuperable obstacles to authorisation'.

It is interesting to note that in Sweetman the Court, referring to the Waddenzee judgment, expressly alluded to the fact that ‘in such a situation, the competent national authority could, where appropriate, grant authorisation, under Article 6(4) of the directive, provided that the conditions set out therein are satisfied’. It seems remarkable that the Court would prefer that competent authorities utilise Article 6(4), rather than strive to achieve a scientifically sound, proportionate and ‘achievable’ integrity standard under Article 6(3), as standard that the Court itself might have identified.

130 AG Opinion (n 3) para 66. The Advocate General goes on to note in respect of sites hosting priority habitat types or species that ‘The Commission indicated at the hearing that, of the 15 to 20 requests so far made to it for delivery of an opinion under that provision, only one has received a negative response’.
131 Judgment (n 3) para 47.