

Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law

by

Stefan Möckel



Sofia–Moscow

NATURE CONSERVATION 23 (SPECIAL ISSUE)

NATURA 2000 APPROPRIATE ASSESSMENT AND DEROGATION PROCEDURE –
LEGAL REQUIREMENTS IN THE LIGHT OF EUROPEAN AND GERMAN CASE-LAW

by Stefan Möckel

Cover photo by: André Künzelmann (UFZ)

First published 2017

ISBN 978-954-642-908-7 (paperback)

Pensoft Publishers

12 Prof. Georgi Zlatarski Street, 1700 Sofia, Bulgaria

Fax: +359-2-870-42-82

info@pensoft.net

www.pensoft.net

Printed in Bulgaria, December 2017

Contents

- I The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive**
Stefan Möckel
- 31 The terms “project” and “plan” in the Natura 2000 appropriate assessment**
Stefan Möckel
- 57 The assessment of significant effects on the integrity of “Natura 2000” sites under Article 6(2) and 6(3) of the Habitats Directive**
Stefan Möckel
- 87 The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests**
Stefan Möckel

The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive

Stefan Möckel¹

¹ *Helmholtz Centre for Environmental Research – UFZ, Department of Environmental and Planning Law, Leipzig, Germany*

Corresponding author: *Stefan Möckel* (stefan.moeckel@ufz.de)

Academic editor: *Jukka Similä* | Received 9 May 2017 | Accepted 10 July 2017 | Published 14 December 2017

<http://zoobank.org/A3498E65-98A5-45E2-A168-96350288D99F>

Citation: Möckel S (2017) The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive. In: Möckel S (Ed.) Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law. Nature Conservation 23: 1–29. <https://doi.org/10.3897/natureconservation.23.13599>

Abstract

The European Union and its Member States have been creating a network of protected areas for habitats and species since 1979. In 2017, this included over 27,500 Natura 2000 sites, a combined area of over 18 percent of the land surface in the EU and around 395,000 km² of marine territory. According to Article 6(3) of the Habitats Directive 92/43/EEC¹ (HD), any projects and plans within these sites or in their vicinity require an appropriate assessment to ensure that they will not have a significant impact on the integrity of Natura 2000 site. The project or plan is to be rejected by the national authorities if this cannot be excluded without remaining reasonable scientific doubts. This article explores the procedural steps and the requirements that must be examined, which are now covered by comprehensive European Court of Justice (ECJ)² case law. Numerous questions that are relevant in practice, however, have only been considered by national courts to date. These will be introduced in this article based on the decisions of the German Federal Administrative Court (BVerwG)³ and will be the focus of a critical discussion. Questions on the range covered by the term

¹ Council Directive of 21.5.1992 on the conservation of natural habitats and of wild fauna and flora, OJ EU no. L 206, of 22.7.1992, p. 7 *et seq.*

² All ECJ decisions can be located based on their case number and can be freely accessed under: curia.europa.eu/juris/recherche.jsf?language=en

³ From 2002 onwards, BVerwG decisions can be located based on their case number and can be freely accessed under: <http://www.bverwg.de/entscheidungen/entscheidungen.php>. References to the locations of earlier decisions are provided in this article.

project and on determining significant impacts will be entered into in greater detail in two further articles, given the scope of the aspects to be examined and explored.

Keywords

European Union (EU), Natura 2000, appropriate assessment, impact assessment, Article 6(3) Habitats Directive, Birds Directive, legal requirements, methodological questions, case law, ECJ, Germany, SCI, SPA, BVerwG

1. Introduction

Over 35 years ago, the European Economic Community also became a community with common environmental standards, years before European environmental legislative powers were incorporated into the treaties. In 1979, the European Economic Community laid down provisions for the protection of European wild bird species and migratory birds in the Birds Directive (BD) 79/409/EEC (newly adopted in Directive 2009/147/EC) for the then 9 Member States. The justification given at the time still applies today: wild bird species are part of a common European heritage and the severe decline in their numbers is an environmental problem that crosses national borders and requires joint responsible action. Through this directive, the European Community simultaneously implemented some of its obligations arising from the new international treaties on nature conservation: the Ramsar Convention on Wetlands of International Importance (1971), the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979) and the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979). The protection of wild birds was predestined for European Community legislation due to the cross-border mobility of bird species. As part of the Convention on Biodiversity (CBD) that was signed in 1992, the European Community extended protection to endangered plants and non-bird species through the Habitats Directive and created the European ecological network “Natura 2000”, which now includes over 27,000 sites, consisting of the sites of Community importance (SCI) under Article 4 HD and of the special protection areas (SPA) provided by Article 4 BD. In the (still) 28 EU Member States, these sites combine to protect over 789,000 km² of the land area in the EU (approx. 18.15 %) and around 395,000 km² of European marine territory (approx. 7 %).⁴ The network serves to protect 231 selected types of habitat and 450 animal and plant species that have been identified as conservation priorities.⁵ The habitats and species that are to be protected by Natura 2000 are the common heritage of the European Community, which is why the Birds Directive and the Habitats Directive envisage specially targeted and enhanced conservation provisions and measures.⁶ In combination with the general species conservation provisions in

⁴ European Commission 2017, p. 8 *et seq.*

⁵ European Commission 2015b, p. 3.

⁶ ECJ, adjudication of 23.5.1990 – C-169/89, margin number 11; adjudication of 11.7.1996 – C-44/95, margin number 23, 26; adjudication of 28.6.2007 – C-235/04, margin number 23; adjudication of 13.7.2006 – C-191/05, margin number 9; adjudication of 11.7.1996 – C-334/04, margin number 24.

Articles 5–9 BD and Articles 12–16 HD, 1,200 species in the EU enjoy special levels of protection, including all European bird species. The aim of the Habitats Directive and the Birds Directive too is to maintain or restore a favourable conservation status for the specifically protected habitat types and species (Articles 2(2) and 3(1) HD, similar Articles 2 and 3(1) Birds Directive, cf. Article 2 no. 1 a) Environmental Liability Directive 2004/35/CE). In this process, the favourable conservation status is not limited to the Natura 2000 sites, but is to be achieved within the biogeographical region in question.

The Directives and the Natura 2000 sites are the most important instruments in achieving the biodiversity objectives of the CBD in the EU,⁷ even though a favourable conservation status had only been attained for 16 percent of habitat types and 23 percent of species in the last reporting period (2007–2012).⁸ On the one hand, the unfavourable conservation statuses are due to the fact that the great majority of Natura 2000 sites are not wild areas, but are frequently sites in historical landscapes or in the cultural landscapes of the present, such that there are a variety of conflicts in relation to land use, changes in land use and social development.⁹ On the other hand, there are still significant deficiencies in the statutory implementation and the practical protection and management of the Natura 2000 sites in the individual Member States.¹⁰

In this process, the Natura 2000 appropriate assessment for impacting projects or plans under Article 6(3) HD is the central statutory instrument for the protection of the sites, in addition to the general prohibition of deterioration in Article 6(2) HD. The ECJ maximised the effectiveness of the assessment by its challenging legal interpretation.¹¹ Proposed inappropriate developments are essentially legally impermissible. According to Article 6(3) HD, the appropriate assessment must take place prior to the authorisation and implementation of a project or plan (*ex ante*).¹² However, in accordance with the European principle of proportionality¹³ referred in Article 5(4) of the Treaty on European Union (TEU), the Habitats Directive does not wish to ban all human activity in Natura 2000 sites. This is why, on the one hand, only significant adverse impacts on the integrity of a Natura 2000 site are relevant and, on the other, according to Article 6(4) HD, a derogating authorisation is possible in favour of public interests.

⁷ Milieu, IEEP and ICF 2016, p. 14 *et seq.*

⁸ European Commission 2015b. cf. Zehetmair et al. *Journal for Nature Conservation* 2015, 53 *et seq.*; Hernando et al. *Biodiversity and Conservation* 2010, 2221 *et seq.*

⁹ EEA 2015, p. 135 *et seq.*

¹⁰ EEA 2015, p. 130 *et seq.*

¹¹ cf. Trouwborst 2016, p. 219 (240).

¹² ECJ, adjudication of 14.1.2010 – C-226/08, margin number 48 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 125, 174.

¹³ cf. ECJ, adjudication of 14.4.2005 – C-441/03, margin number 27; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48; BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7, 12.

The appropriate assessment requires comprehensive investigation and raises diverse legal and practical questions.¹⁴ With the aid of a variety of guidance documents for the appropriate assessments in general and, more specifically, to ensure compatibility with diverse anthropogenic uses, the European Commission is attempting to support Member State obligations through standardisation.¹⁵ The European Commission provided for an evaluation study to examine how the appropriate assessment is used in the Member States.

In this study, *Sundseth* and *Roth* conclude that some countries are more actively working on, and succeeding in, ensuring the full and efficient implementation of Article 6(3) HD, as opposed to countries where there are known to be systemic failings with implementation.¹⁶ The majority of projects and plans within or in the vicinity of Natura 2000 sites were assessed as compatible in many Member States.¹⁷ In addition to historical problems, the authors identified the following ongoing problems:

- Poor quality of the appropriate assessment undertaken,
- Lack of skills/ knowledge /capacity in the Article 6(3) HD procedure,
- An inadequate knowledge base on which to assess impacts,
- Inconsistent screening of plans and projects,
- Lack of understanding of key concepts and legal terms,
- Persistent lack of assessment of cumulative effects,
- Confusion with the Environmental Impact Assessment (EIA) / Strategic Environmental Assessment (SEA) procedure,
- Lack of early dialogue,
- Lack of effectiveness of appropriate assessments on plans and
- Problems during public consultation.¹⁸

A fundamental problem is that Member States have often organised the appropriate assessment as an integrated part of a specialised statutory authorisation procedure,¹⁹ such that the responsible agency then undertakes the assessment.²⁰ In some cases, the appropriate assessment is carried out within the scope of a more general environmental impact assessment due to the EIA Directive 2011/92/EU²¹

¹⁴ Milieu, IEEP and ICF 2016, p. 102 *et seq.*; European Commission 2001; *Fretzer Ecological Modelling* 2016, 160 *et seq.*; *Jackson Journal of Environmental Law* 2014, 495 *et seq.*; *Ginige/Thornton/Ball Journal of Water Law* 2010, 66 *et seq.*; *Peterson/Kosel/Uustal Journal of Environmental Assessment Policy and Management* 2010, 185 *et seq.*; *Söderman Environmental Impact Assessment Review* 2009, 79 *et seq.*; *Palerm European Environment* 2006, 127 *et seq.*; *Lawton Journal of Water Law* 2007, 47 *et seq.*

¹⁵ can be accessed on http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

¹⁶ *Sundseth/Roth* 2013, p. 85 *et seq.*

¹⁷ *Sundseth/Roth* 2013, p. 30 *et seq.*

¹⁸ *Sundseth/Roth* 2013, p. 41 *et seq.* cf. also Milieu, IEEP and ICF 2016, p. 104 *et seq.*

¹⁹ for example, this applies in Germany.

²⁰ *Sundseth/Roth* 2013, p. 19.

²¹ Directive on Environmental Impact Assessment for specific public and private projects adopted by the European Parliament and Council on 13.12.2011, OJEU no. L 26 of 28.1.2012, p. 1 *et seq.*

and SEA Directive 2001/42/EEC^{22,23} In cases of a procedure that is integrated, the assessment, including the required investigations and evaluations, is generally not carried out by the Nature Conservation authorities that have greater specialist knowledge.²⁴ However, according to *Sundseth* and *Roth*, it is precisely the authorities without the necessary competence that are a big problem in relation to the effective implementation of Article 6(3) HD.²⁵ Nature Conservation authorities should therefore at least be involved in such procedures, if possible, in the form of reaching a consensual decision.

This article aims to introduce the steps and requirements of the appropriate assessment under Article 6(3) HD and to explore and, where necessary, provide a critical discussion of the decisions enacted by the European Court of Justice (ECJ) and the BVerwG, as well as of the European Commission guidelines. The *first step* in an appropriate assessment is the compulsory examination of whether an impact assessment is actually required (see 2.3). The prerequisite to this is a project or a plan that can be assessed within the meaning of Article 6(3) HD and does not serve the immediate purpose of management of the site. An impact assessment of a proposed development outside the boundaries of Natura 2000 sites may also be required as the potential consequences are decisive. Furthermore, a screening process must examine whether significant adverse impacts on the integrity of a Natura 2000 site are to be expected, i.e. cannot be excluded with certainty. In the event that all of these points apply, the *second step* involves the authorities assessing the compatibility of the project or plan (see 3) and, if appropriate, obtaining the opinion of the general public. Compatibility can only be ascertained, if concerns in relation to significant adverse impacts on the site can be ruled out without any reasonable doubt. This counter-evidence requires the authorities to consider the best relevant scientific knowledge in the field to enable them to determine without remaining reasonable scientific doubts that the plan or project will not have any permanent adverse impacts on the integrity of the site concerned. If this cannot be demonstrated, then the national authorities must not agree to the project or the plan owing to Article 6(3) HD. The proposed development can only be authorised through a *derogating approval*²⁶ in accordance with Article 6(4) HD. In the event that a project or plan is approved after its compatibility has been established or based on a derogating decision, the general prohibition of deterioration laid down in Article 6(2) HD nonetheless applies to its future realisation and operation.

²² Directive on the assessment of the effects of certain plans and programmes on the environment adopted by the European Parliament and Council on 27.6.2001, OJEU no. L 197 of 21.7.2001, p. 30 *et seq.*

²³ recommending *Haumont* 2015, p. 93 (97 *et seq.*).

²⁴ The BVerwG sees no problem here in relation to European Law (*cf.* BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 11).

²⁵ *Sundseth/Roth* 2013, p. 52 *et seq.*, 87, 92.

²⁶ elaborately in *Möckel* Nature Conservation 2017b.

2. Requirement for an appropriate assessment

2.1. Spatial and temporal scope

The requirement for an appropriate assessment applies for each SCI within the meaning of Article 4 HD. In addition, appropriate assessments under Article 7 HD are also required for each SPA within the meaning of Article 4(1) and (2) BD. Both types of sites combine to form the Natura 2000 network and are also referred to overall as Natura 2000 sites (Article 3(1) HD). The requirement for an appropriate assessment is not limited to projects and plans that envisage proposed developments and measures within Natura 2000 sites, but also applies when proposed developments and measures will impact on a Natura 2000 site from outside its boundaries (e.g. because of emissions, barrier or other effects).²⁷ Which projects are obliged to undergo an assessment does not depend on the specific size of the radius, but on the habitat types and species that are protected, the kind of project and impact and on the attribution of effects over distance. Indirect and collateral effects of a proposed development are also relevant to the assessment, insofar as they can be attributed.²⁸ Because no evidence for causality is required in the appropriate assessment, the probability of significant adverse effects due to the proposed development is sufficient.²⁹

2.1.1. SCI in the Habitats Directive

An appropriate assessment is to be undertaken in SCIs as required by Article 4(5) HD from the point onwards when the site concerned has been included in one of the European Commission biogeographical lists of sites in accordance with Article 4(2) third paragraph HD.³⁰ Protection at the national level under Article 4(4) HD is not required for applicability, such that any deficiencies in protection at the national level do not affect validity. No impact assessments are necessary in the case of sites that have just been reported by Member States or should have been reported (called potential SCIs), rather more, measures to safeguard the site must simply be

²⁷ ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 29 *et seq.*, adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 32–34; decision of 23.1.2015 – 7 VR 6.14, margin number 16; adjudication of 14.7.2011 – 9 A 12.10, margin number 93.

²⁸ *cf.* e.g. BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 11.

²⁹ *cf.* ECJ, adjudication of 10.11.2016 – C-504/14, margin number 29; ECJ, adjudication of 14.1.2016 – C-399/14, margin number 42; adjudication of 14.1.2016 – C-141/14, margin number 58; adjudication of 24.11.2011 – C-404/09 margin number 142.

³⁰ ECJ, adjudication of 13.1.2005 – C-117/03 – *Dragaggi*, margin number 25; adjudication of 11.9.2012 – C-43/10 margin number and headnote 6.

taken.³¹ However, the voluntary application of Article 6(3) HD is not prohibited and may be recommendable in individual cases.³² A similar approach applies to sites under consultation within the meaning of Article 5 HD.

2.1.2. SPA in the Birds Directive

SPAs are selected and established solely by the Member States according to Article 4(1) and (2) BD. In accordance with Article 7 HD, the provisions in Article 6(2)-(4) HD only replace the demand for protection laid down in Article 4(4) BD as of the date on which the SPA in question is established in a legally binding manner as a special protection area.³³ The minimum requirement for this process is the precise specification of the boundaries of the site and the aims for conservation and protection.³⁴ In spite of the requirement for a formalised impact assessment, placement under protection constitutes an advantage for projects or plans that will have an adverse impact as, in contrast to Article 6(4) HD, Article 4(4) BD makes no exceptions in relation to the protective system.³⁵ However, protection as an SPA has no retrospective effect, as this contravenes both Article 7 HD and the enforcing nature granted by the ECJ³⁶ to Article 4(4) first sentence BD, whereby Member States are not permitted to gain any advantages from violation of their obligations in relation to designations under Article 4(1) and (2) BD.³⁷ Projects or plans that were approved or decided on prior to designation as an SPA can therefore not retrospectively invoke the later designation during court proceedings.

2.1.3. Projects and plans prior to listing or designation of a site

On principle, no subsequent appropriate assessment is to be carried out for projects and plans that had already been authorised prior to the listing of SCIs or prior to the

³¹ ECJ, adjudication of 13.1.2005 – C-117/03, margin number 22 *et seq.*; adjudication of 15.3.2012 – C-340/10, margin number 43–47; BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 34 *et seq.*; decision of 22.6.2015 – 4 B 59/14, margin number 23.

³² BVerwG, decision of 7.9.2005 – 4 B 49.05, margin number 11.

³³ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 97; adjudication of 13.12.2007 – C-418/04, margin number 173; adjudication of 27.2.2003 – C-415/01, margin number 16 *et seq.*; adjudication of 6.3.2003 – C-240/00, margin number 19. Following BVerwG e.g., adjudication of 9.2.2017 – 7 A 2.15, margin number 215. More detailed to the requirements and consequences Möckel JEEPL 2014, 392 (400 *et seq.*).

³⁴ BVerwG, adjudication of 8.1.2014 – 9 A 4.13, headnote 5; adjudication of 1.4.2004 – 4 C 2.03, text number 3.2.

³⁵ cf. ECJ, adjudication of 11.7.1996 – C-44/95, margin number 37; adjudication of 28.2.1991 – C-57/89, margin number 22–24; BVerwG, adjudication of 18.7.2013 – 4 CN 3.12, margin number 29 *et seq.*; Möckel JEEPL 2014, 392 (402 *et seq.*, 405 *et seq.*); Ureta JEEPL 2007, 84 (86).

³⁶ ECJ, adjudication of 18.10.1989 – C-374/87, margin number 50–56.

³⁷ BVerwG, adjudication of 18.7.2013 – 4 CN 3.12, margin number 28 *et seq.*

designation of SPAs, even if the proposed development has not yet been realised.³⁸ However, the execution and operation of these proposed developments are subject to the protective effect of the prohibition of changes and disturbance in Article 6(2) HD.³⁹ Pursuant to the ECJ, this is designed to guarantee a similar level of protection to Article 6(3) HD,⁴⁰ which is why in cases where an appropriate assessment constitutes the sole suitable measure for the prevention of deterioration or disturbance caused by the execution of a proposed development, it must also be carried out within the scope of Article 6(2) HD.⁴¹ This is the case, in particular, if a proposed development can only be realised or continue to exist based on the reasons for derogation stated in Article 6(4) HD,⁴² as a full appropriate assessment is a compulsory condition for a derogation decision pursuant to settled ECJ case law.⁴³

A subsequent appropriate assessment is also necessary if national law already requires a renewed authorisation assessment for an existing project or plan because, for example, significant changes are to be made or the earlier approval was issued for a limited period.⁴⁴ This also applies to replacement constructions, e.g. the construction of a new wind power plant or a bridge, if an authorisation procedure is required for this pursuant to national legislation. Even recurrent measures are to be subjected to an appropriate assessment on principle, unless they can be classified as a cohesive project.⁴⁵

2.2. Plans and projects

Article 6(3) HD refers to plans and projects without the Habitats Directive defining these terms in greater detail. According to Article 6(3) HD, only projects and plans that are directly connected with or necessary to the management of the site require no appropriate assessment. As a derogation provision, the scope for such associated management developments is to be narrowly defined and is only applicable if such developments are intended to promote the relevant conservation objectives in the site within the meaning

³⁸ cf. only ECJ, adjudication of 14.1.2016 – C-399/14, margin number 33.

³⁹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 33; adjudication of 24.11.2011 – C-404/09, margin number 124 *et seq.*; adjudication of 14.1.2010 – C-226/08, margin number 49.

⁴⁰ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 52; adjudication of 15.5.2014 – C-521/12, margin number 19.

⁴¹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 42–46.

⁴² ECJ, adjudication of 14.1.2016 – C-399/14, margin number 54 *et seq.* and headnote 1; adjudication of 10.11.2016 – C-504/14, margin number 41.

⁴³ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 56 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 11.4.2014 – C-258/11, margin number 35; adjudication of 16.2.2001 – C-182/10, margin number 74 *et seq.*

⁴⁴ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 76; adjudication of 14.1.2010 – C-226/08, margin number 41–46; adjudication of 7.9.2004 – C-127/02, margin number 28 *et seq.*

⁴⁵ Möckel *Nature Conservation* 2017c.

of Article 6(1) HD.⁴⁶ All other projects and plans are inherently obliged to undergo an assessment, irrespective of whether they are being instigated by a governmental authority, a company or a citizen. Even projects and plans put forward by the legislature are not exempt from the protective system and are also to be assessed.⁴⁷

2.2.1. Projects⁴⁸

The ECJ refers to the term project in Article 1(2) a) of the EIA Directive for its interpretation of the term and takes a broad view on what projects are. The term includes not only building installations, but also all human interventions in nature and the landscape, in accordance with the second amendment to the EIA Directive.⁴⁹ It is therefore not the kind of proposed development that is decisive, but simply the potential effects on Natura 2000 sites, which is why an appropriate assessment is also necessary for activities that are not intrinsically associated with physical change.⁵⁰ Furthermore, an appropriate assessment is not limited to proposed developments for which an obligation for approval or of disclosure is planned by national rules of procedure.⁵¹ The ECJ has taken clear action against⁵² any attempts by Member States⁵³ to extend the scope of the term project and to thereby limit the applicability of the appropriate assessment through a statutory exemption for specific interventions and types of proposed development. An exemption is only permissible in exceptional cases where the criteria for exemption can guarantee that the possibility of a significant adverse impact on the protected areas due to the projects in question is ruled out.⁵⁴

This is why still an assessment may be required for agricultural, forestry and fishery measures that are generally not subject to approval, if they take place in the vicinity of

⁴⁶ ECJ, adjudication of 4.3.2010 – C-241/08, margin number 50–56.

⁴⁷ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 69.

⁴⁸ More detailed to the project term *Möckel* Nature Conservation 2017c.

⁴⁹ settled ECJ case law, adjudication of 14.1.2010 C-226/08, margin number 38; adjudication of 7.9.2004 – C-127/02, margin number 24 *et seq.*; adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.* Subsequent BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 29; adjudication of 12.11.2014 – 4 C 34.13, margin number 29; decision of 11.5.2014 – 7 B 18.14, margin number 24.

⁵⁰ settled BVerwG case law, adjudication of 12.11.2014 – 4 C 34.13, margin number 29; adjudication of 19.12.2013 – 4 C 14.12, margin number 28; decision of 18.5.2004 – 7 B 18.04, margin number 24. *cf.* ECJ, adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.*

⁵¹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68 *et seq.*; adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.*

⁵² ECJ, adjudication of 26.5.2011 – C-538/09, margin number 45.

⁵³ e.g. so Germany with the Federal Nature Conservation Act between 2002–2007.

⁵⁴ ECJ, adjudication of 10.1.2006 – C-98/03, margin number 41; adjudication of 26.5.2011 – C-538/09, margin number 41 *et seq.*

Natura 2000 sites.⁵⁵ Significant adverse impacts may be present, especially in cases of agricultural, forestry or fishery measures that are not commonplace, such as clearing woodland, the use of plant protection agents in forests, creation of an aquaculture, ploughing of a permanent green area, resumption of extensive exploitation that had been given up or its intensification.⁵⁶ At minimum, a specific obligation of disclosure is required in relation to Natura 2000 to ensure that the responsible authorities have the power to assess the compatibility of all relevant projects in cases of proposed developments that do not inherently require approval or disclosure.⁵⁷

2.2.2. Plans

In contrast to the term project, the ECJ has not yet clarified whether recourse can and should be taken to the definitions of terms used in the European directives on environmental impact assessments, as is the case for the term project. Article 2 a) SEA Directive covers plans that are devised or accepted by national, regional or local authorities (including statutory master plans) and must be compiled due to statutory or administrative provisions. Similar requirements are also to be assumed for Article 6(3) HD as only governmental plans with externally binding or official internal legal effects can predetermine an adverse impact on a Natura 2000 site by a project in a legally relevant manner. The ECJ has made clear that plans and projects devised by legislative bodies are also subject to the obligations given in Article 6(3) HD, as was already mentioned at the start.

2.3. Preliminary assessment (Screening)

An appropriate assessment is only to be carried out if there is the likelihood or threat that a plan or project, either alone or in combination with other projects and plans, will have a significant adverse impact on the integrity of the site concerned, as the conduct of an appropriate assessment involves a substantial amount of work and expense and is associated with

⁵⁵ on land uses that define a site, such as hunting: ECJ, adjudication of 4.3.2010 – C-241/08, margin number 39, 56; on mechanical shell fishing: ECJ, adjudication of 7.9.2004 – C-127/02, margin number 27, NuR 2004, 788 *et seq.*; on the intensification of land use, drainage and consolidation of agricultural land ECJ, adjudication of 25.11.1999 – C-96/98, margin number 29, 45 *et seq.*; on irrigation ECJ, adjudication of 18.12.2007 – C-186/06, margin number 26 *et seq.* and on overgrazing ECJ, adjudication of 13.6.2002 – C-117/00, margin number 22–33. Also European Commission 2015a, p. 55 *et seq.*; European Commission 2012b, p. 45 *et seq.*; European Commission 2014, p. 29 *et seq.*

⁵⁶ cf. European Commission 2015a, p. 61 *et seq.*, 66 *et seq.*, 76 *et seq.*; European Commission 2012b, p. 45 *et seq.*

⁵⁷ cf. § 34(6) Federal Nature Conservation Act in Germany.

delays to projects.⁵⁸ No appropriate assessment is required if this can clearly be ruled out, i.e. without reasonable doubt and relevant uncertainties, by a screening process.⁵⁹ The summary appraisal of a potential threat is to be undertaken based on objective circumstances and under consideration of the specific characteristics and environmental conditions of the Natura 2000 site concerned.⁶⁰ However, there is no obligation to carry out an assessment based on purely theoretical concerns.⁶¹ Conversely, potential thresholds related to bagatelles and irrelevance or mitigation measures⁶² are not permitted to already be included in the screening in support of the proposed development.⁶³ The recognition of such thresholds or measures requires precisely determined adverse impacts, that are only to be ascertained and evaluated in the main assessment as, on principle, any exceeding of the thresholds for reaction and load is significant.

3. Appropriate assessment

3.1. Basic requirement

In recognition of the precautionary principle⁶⁴ required under Article 191(2) of the Treaty on the Functioning of the European Union (TFEU) and the importance of the Natura 2000 sites as common European heritage,⁶⁵ settled ECJ case law has established

⁵⁸ ECJ, adjudication of 7.9.2004 – C-127/02, margin number 43 *et seq.*; adjudication of 26.5.2011 – C-538/09, margin number 39; adjudication of 21.7.2011 – C-2/10, margin number 41 *et seq.*; BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 10. A detailed description made European Commission 2001, p. 17 *et seqq.* and e.g. *Peterson/Kose/Uustal* Journal of Environmental Assessment Policy and Management 2010, 185 (190 *et seqq.*).

⁵⁹ *cf.* BVerwG, adjudication of 29.9.2011 – 7 C 21.09, margin number 40; adjudication of 18.12.2014 – 4 C 35.13, margin number 33; decision of 13.8.2010 – 4 BN 6.10, margin number 4; adjudication of 17.1.2007 – 9 A 20.05, margin number 60; *Peterson/Kose/Uustal* Journal of Environmental Assessment Policy and Management 2010, 185 (197).

⁶⁰ ECJ, adjudication of 7.9.2004 – C-127/02, margin number 44, 49; adjudication of 26.5.2011 – C-538/09, margin number 39; BVerwG, adjudication of 18.12.2014 – 4 C 35.13, margin number 33, 48; adjudication of 17.1.2007 – 9 A 20.05, margin number 61.

⁶¹ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 60.

⁶² Due to the European Commission mitigation measures are an integral part of the specifications of a plan or project and aimed at minimising or even cancelling the negative impact of a plan or project, during or after its completion (European Commission 2000, p. 37).

⁶³ European Commission 2001, p. 14; *Peterson/Kose/Uustal* Journal of Environmental Assessment Policy and Management 2010, 185 (196 *et seq.*); *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 11 *et seq.* Different view BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 124; *Lambrecht/Trautner* 2007, p. 68 *et seqq.*; *Wulfert et al.* 2015, p. 44 *et seqq.*; *cf.* for UK *Therivel* Environmental Impact Assessment Review 2009, 261 (269 *et seq.*).

⁶⁴ ECJ, adjudication of 26.5.2011 – C-538/09, margin number 39; adjudication of 15.5.2014 – C-521/12, margin number 26; adjudication of 7.9.2004 – C-127/02, margin number 44, 58.

⁶⁵ ECJ, adjudication of 28.6.2007 – C-235/04, margin number 23; adjudication of 13.7.2006 – C-191/05, margin number 9.

basic requirements for the compatibility of a project or plan under Article 6(3) HD.⁶⁶ In the judgement *Sweetman and Others* the ECJ had brought his requirements to a good scheme.⁶⁷ The main statements are:

40 Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – 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. That is so where no reasonable scientific doubt remains as to the absence of such effects (see, to this effect, Case C-404/09 Commission v Spain, paragraph 99, and Solvay and Others, paragraph 67).

41 It is to be noted that, since the authority must refuse to authorise the plan or project being considered where uncertainty remains as to the absence of adverse effects on the integrity of the site, 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. A less stringent authorisation criterion than that in question could not ensure as effectively the fulfilment of the objective of site protection intended under that provision (Waddenvereniging and Vogelbeschermingsvereniging, paragraphs 57 and 58).

The required certainty must be based on objective circumstances and on the best relevant scientific knowledge in the field in relation to the exclusion of significant adverse impacts on the integrity of Natura 2000 sites⁶⁸. This means that any remaining reasonable doubt counts against the proposed development (see 3.3.2). In accordance with the ECJ, an appropriate assessment that has been carried out based on these standards shall not be fragmentary and must contain complete, precise and conclusive findings that are suited to the exclusion of any reasonable scientific doubt in relation to the effects of the planned proposed development on the site.⁶⁹ In the event that no evidence to the contrary can be provided, showing that significant adverse impacts on the site can be excluded if the project is realised, the proposed development is prohibited on principle and the responsible national authority may only approve it under the conditions laid down in Article 6(4) HD.⁷⁰ Adherence to all requirements during the

⁶⁶ ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 33; adjudication of 14.1.2016 – C-399/14, margin number 43 *et seq.*, 48 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 20 *et seq.*; adjudication of 11.9.2012 – C-43/10, margin number 111 *et seq.*; adjudication of 7.9.2004 – C-127/02, margin number 41–49, 56–59.

⁶⁷ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 40 *et seq.*

⁶⁸ ECJ, decision of 19.1.2012 – C-117/11, margin number 24. Critical to these scientific approach of dealing with uncertainties *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 *et seq.*; *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 (390 *et seq.*).

⁶⁹ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 100; adjudication of 11.4.2013 – C-258/11, margin number 44; adjudication of 15.5.2014 – C-521/12, margin number 27; adjudication of 14.1.2016 – C-399/14, margin number 50.

⁷⁰ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 46 *et seq.*

examination by the authorities is to be assessed in full by the national courts in the case of a lawsuit.⁷¹ Overall, the investigation will go into substantially greater detail than environmental impact assessments made under the EIA Directive and the SEA Directive. However, project alternatives are officially to be considered in the derogation assessment,⁷² even if in practice the examination of alternative solutions by project or plan proponents may be the first phase of the process.⁷³

Within the scope of its comprehensive case law, the BVerwG⁷⁴ has amended these requirements in relation to some methodological perspectives (see 3.3) and material aspects.

3.2. Timing of the assessment

On principle, the facts of the case that pertained at the time of issuing the decision for authorisation for a project or the resolution on a plan are to form the basis for the screening and the appropriate assessment.⁷⁵ However, the potential future effects of the project or plan on the conservation objectives for the affected Natura 2000 site are to be forecast based on these facts of the case. The decision on whether significant adverse impacts are to be expected or can be excluded without remaining reasonable scientific doubts is thus essentially based on a hypothetical assumption. This is associated with uncertainties, as is the case for all forecasts, the magnitudes of which increase, the higher the range of the temporal scope of the forecast, the greater the complexity of the effects of the project or plan, and the lower the available knowledge on the affected habitat types, species and on the effects that are to be expected.

3.3. Methodological questions

Article 6(3) HD does not specify methods for data collection or analysis for the conduct of the appropriate assessment.⁷⁶ Nevertheless, the certainty demanded by the ECJ with reference to the exclusion of significant adverse impacts requires a high methodological standard of investigation.

⁷¹ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 44.

⁷² ECJ, adjudication of 4.3.2010 – C-241/08, margin number 69.

⁷³ European Commission 2001, p. 13 et seq.

⁷⁴ settled case law e.g. BVerwG, adjudication of 17.1.2007 – 9 A 20.05, headnote 10–12; adjudication of 12.3.2008 – 9 A 3.06, margin number 67; adjudication of 10.4.2013 – 4 C 3.12, margin number 10.

⁷⁵ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 60 *et seq.*; BVerwG, decision of 6.6.2012 – 7 B 68.11, margin number 9; adjudication of 18.7.2013 – 4 CN 3.12, margin number 33.

⁷⁶ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 26; ECJ, adjudication of 11.9.2012 – C-43/10, margin number 111; adjudication of 7.9.2004 – C-127/02, margin number 52.

3.3.1. Risk analysis, risk forecasting and risk assessment based on the best scientific knowledge in the field

According to the BVerwG, a specialist scientific consultation on the risk analysis, risk forecasting and risk assessment forms the formal core of the appropriate assessment.⁷⁷ The reason for this is that an individual case evaluation that is essentially dependent on specialist conservation findings and assessments is required to judge whether a project might have significant adverse impacts on the integrity of an SCI or SPA.⁷⁸ This must be based on the current state of scientific debate and the best relevant scientific knowledge in the field, including generally recognised empirical propositions and methods of investigation.⁷⁹ The specialist scientific insights that are gained are to be documented, as this is the only way whereby evidence can be provided showing that the accessible scientific knowledge resources were exploited in full and the assessments have complied with the best possible scientific standards.⁸⁰ Not only the European Commission has produced guidance⁸¹ to simplify the process of determining the most important current scientific knowledge in each individual case, but the authorities in Germany have also compiled specialist scientific conventions and produced working aids on specific questions related to the appropriate assessment⁸² that have been recognised by the BVerwG as important tools for reaching decisions in administrative and court proceedings.⁸³ Nevertheless, the standards specified there – e.g. information on non-significant losses of area or irrelevant pollutants – are only guideline values that claim no normative legitimacy and permit derogation in individual cases.⁸⁴ Furthermore, it must be noted that habitat types, species and natural environmental conditions, as well as scientific insights, generally recognised empirical propositions and methods continue to develop over time, which is why specialist conventions and working aids require constant updating.⁸⁵ Failing this, the

⁷⁷ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68 and headnote 12.

⁷⁸ settled case law BVerwG, decision of 7.2.2011 – 4 B 48.10, margin number 6; adjudication of 12.3.2008 – 9 A 3.06, margin number 68 and adjudication of 17.1.2007 – 9 A 20.05, margin number 43.

⁷⁹ settled case law ECJ, adjudication of 11.9.2012 – C-43/10, margin number 113; adjudication of 26.10.2006 – C-239/04, margin number 20; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48; adjudication of 17.1.2007 – 9 A 20.05, margin number 66 and headnote 9.

⁸⁰ BVerwG, adjudication of 10.4.2014 – 4 C 3.12, margin number 20; adjudication of 17.1.2007 – 9 A 20.05, margin number 70 and headnote 13.

⁸¹ see http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm.

⁸² cf. Wulfert et al. 2015; Lambrecht/Trautner 2007; Balla et al. 2013. The Federal Agency for Nature conservation (BfN) set up a specialist online information system for impact assessments in SCIs in 2014 (<http://ffh-vp-info.de/FFHVP/Page.jsp>).

⁸³ cf. BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 37; adjudication of 12.3.2008 – 9 A 3.06, margin number 125.

⁸⁴ settled case law BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 66; adjudication of 6.11.2012 – 9 A 17.11, margin number 46 *et seq.*; adjudication of 12.3.2008 – 9 A 3.06, margin number 125–132.

⁸⁵ cf. Wulfert et al. 2015, p. 47.

responsible authorities are under the obligation to examine whether these actually still represent the best state of scientific knowledge in individual cases.

The required investigations in the Natura 2000 site concerned must consist of concrete observations, based on these scientific insights, empirical propositions and methods.⁸⁶ The investigations must be thorough and permit precise and conclusive findings.⁸⁷ The concrete findings are to be documented.⁸⁸ Older data may only be referred to if the natural and spatial features of the Natura 2000 site have remained largely unchanged⁸⁹ or if these are more likely to result in an overestimate of the pressures on the site than in an underestimate, due to regressive trends in the impact of these pressures.⁹⁰ The BVerwG awards to the authorities a subject-specific appraisal prerogative if multiple procedures for determination and assessment are recognised that use different methods and criteria for investigation.⁹¹ Whereas methods that are regarded as obsolete by the scientific field are prohibited, this must not simply be assumed to be the case if a different method that is recognised would yield results that are not in full agreement.⁹²

However, the state of scientific debate and knowledge in relation to the impacts of diverse proposed developments on habitat types and species is often fluid, and generally accepted specialist scientific empirical propositions are not necessarily available.⁹³ This means there is a lack of the necessary certainty if the risk analysis, risk forecasting and risk assessment do not consider the best state of scientific knowledge or if, from an objective perspective, the relevant scientific knowledge in the field are insufficient at the time to exclude, without reasonable doubt, the possibility that significant adverse impacts will not occur.⁹⁴

However, the BVerwG also sees limits in relation to the obligations for investigation:

The precautionary principle under European Community Law demands that existing scientific uncertainties shall be reduced to a minimum, if feasible (...). This requires the exploitation of all scientific means and resources (...), but does not mean that research is to be commissioned within the scope of a Habitats Directive impact assessment to address gaps in knowledge and methodological uncertainties within the scientific field. Rather more, Article 6(3) HD demands the use of the 'best available scientific means' (...). In this case, the recognised scientific meth-

⁸⁶ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68.

⁸⁷ settled case law ECJ cf. footnote 69. Subsequent BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48.

⁸⁸ BVerwG, adjudication of 10.4.2014 – 4 C 3.12, margin number 20; adjudication of 17.1.2007 – 9 A 20.05, margin number 70 and headnote 13.

⁸⁹ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 63.

⁹⁰ BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 76.

⁹¹ BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 73–75; adjudication of 14.7.2011 – 9 A 12.10, margin number 62.

⁹² BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 26; adjudication of 12.3.2008 – 9 A 3.06, margin number 73.

⁹³ BVerwG, decision of 7.2.2011 – 4 B 48.10, margin number 5. *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 *et seq.* More detailed, when also for conservation of species: BVerwG, adjudication of 9.7.2008 – 9 A 14.07, margin number 64 *et seq.*

⁹⁴ BVerwG, decision of 7.2.2011 – 4 B 48.10, margin number 5.

*odology includes highlighting the gaps in scientific knowledge that cannot be addressed within a suitable timeframe and estimating their relevance to the findings (cf. Guideline on Habitats Directive Impact Assessment, p. 31). This risk assessment can fulfil the function of developing proposals for effective risk management during the course of the Habitats Directive impact assessment, namely, to determine which measures are appropriate and required to prevent the risk from becoming reality (cf. ECJ, adjudication of 11 September 2002 – T-13/99 – Summary of Decisions 2002, II-3305, margin number 163). In this process, insofar as monitoring appears to be necessary, the environmental management systems standard is to be adhered to (...).*⁹⁵

3.3.2. Handling of uncertainties related to estimates and forecasting

Uncertainties in forecasting and estimating the potential effects and their significance count against the project due to the requirement for certitude.⁹⁶ This handling of uncertainties in relation to forecasting is significantly stricter, than the requirements of the high courts in relation to other decisions on forecasting, at least in Germany, which must only be examined to ascertain whether they were processed using flawless methodology, are not based on unrealistic assumptions and justify the outcome of forecasting in a comprehensible manner,⁹⁷ whereby tenable alternative estimates are no reason for an objection.⁹⁸

It is therefore no surprise that the BVerwG mitigates the strict demands of the ECJ in relation to certitude in cases of scientific uncertainties relating to, for example, interactions that cannot be addressed at the time. The BVerwG therefore states that it is permissible to work with forecasting probabilities and estimates which must, however, be identified and justified.⁹⁹ Conclusions by analogy, presumptions of truth and worst case scenarios are essentially also valid tools, so long as the outcomes achieved through these tools err on the “safe side” with reference to the problems under investigation, they document the crucial facts of the case in a pertinent manner and permit a differentiated conservation concept.¹⁰⁰ For the BVerwG and the Netherlands Superior Ad-

⁹⁵ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 66.

⁹⁶ explicitly, ECJ, adjudication of 11.9.2012 – C-43/10, margin number 112. *cf. Sobotta* Journal for Nature Conservation 2017, in press; *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 *et seq.* to the debate and the court decisions to mussel seed fishery in the Netherlands, which results from the ECJ, adjudication of 7.9.2004 – C-127/02.

⁹⁷ e.g. BVerwG, adjudication of 9.6.2010 – 9 A 20.08, margin number 73; adjudication of 27.10.1998 – 11 A 1.97, BVerwGE 107, p. 313 (326). *cf.* for other countries *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 *et seq.*

⁹⁸ BVerwG, adjudication of 27.11.1996 – 11 A 99.95, JURIS, margin number 29; adjudication of 20.4.2005 – 4 C 18.03, text number 2.4.

⁹⁹ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 41.

¹⁰⁰ settled case law BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 51; adjudication of 14.7.2011 – 9 A 12.10, margin number 71; adjudication of 17.1.2007 – 9 A 20.05, margin number 64. *cf.* also the advanced standards for conclusions by analogy of the VGH Kassel, adjudication of 21.8.2009 – 11 C 318/08.T, margin number 243, which the BVerwG has, however, left open (BVerwG, decision of 14.4.2011 – 4 B 77.09, margin number 14, 19 *et seq.*)

ministrative Court gaps in knowledge are essentially not an obstacle to authorisation that cannot be overcome if the conservation concept includes plans for effective risk management with appropriate monitoring.¹⁰¹ But in a current adjudication the ECJ was very sceptical in respect of taking into account a following risk management with a multi-phase monitoring.¹⁰² So uncertainties that cannot be cleared up result in the inadmissibility of the proposed development so long as no derogating authorisation is possible under Article 6(4) HD.

3.3.3. Steps in the investigation

The following individual steps in the investigation are necessary for the appropriate assessment:

1. The concrete conservation objectives and relevant objects for assessment in the affected site are to be determined and located as closely as possible based on the declaration on the protected site, Standard Data Forms and management plans (see 3.4).
2. The abundance and condition of protected habitat types in the site, including its typical species, and of the protected species, are to be determined with a survey that is based on current and reliable data¹⁰³ (see 3.5).
3. All possible consequences of the project, individually or in combination with other plans or projects, that might have an adverse impact on the conservation objectives for the site concerned are to be determined and identified (see 3.6).
4. Estimates are to be provided on the extent to which these effects could impact on the protected habitat types and species and whether these could be so negative that the conservation objectives might no longer be achieved in full in the site (see 3.7). In this process, mitigation measures may also be considered in a limited fashion.¹⁰⁴

3.4. Conservation objectives and relevant items for protection

Article 6(3) HD requires the effects of a proposed development on the integrity of a Natura 2000 site to be assessed in relation to their compatibility with the concrete conservation objectives for the site concerned.¹⁰⁵ The conservation objectives defined

¹⁰¹ settled case law BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 56; adjudication of 12.3.2008 – 9 A 3.06, margin number 105; adjudication of 17.1.2007 – 9 A 20.05, margin numbers 64, 66, 53 and headnote 11. Netherlands Superior Administrative Court (Raad van State), adjudication of 29.8.2007 – 200606028. These suggest also e.g. *McGillivray* JEEPL 2011, 329 (349 *et seq.*); *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 (383); *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 (919 *et seq.*).

¹⁰² ECJ, adjudication of 26.4.2017 – C-142/16, margin number 39–44.

¹⁰³ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 115.

¹⁰⁴ see *Möckel* Nature Conservation 2017a.

¹⁰⁵ ECJ, adjudication of 13.12.2007 – C-418/04, margin number 243.

for each Natura 2000 site therefore constitute both the item for protection and also set the standard for the assessment.¹⁰⁶ The focus of the conservation objectives are the habitat types listed in Annex I HD and the species listed in Annex II HD, as well as bird species listed in Annex I BD and migratory bird species, based on which the site has been selected. A favourable conservation status is to be safeguarded or restored for these habitat types and species (Article 2(2), 3(1) HD and Articles 2, 3(1) Birds Directive). The Member States first specify which habitat types and species this pertains to for the SCIs in the Standard Data Forms and these are then sent to the European Commission.¹⁰⁷ This is followed later on by a binding specification within the scope of the statutory designation of the protected area. These specifications made in the statutory designation of the protected area precede the Standard Data Forms, which are to be updated accordingly.¹⁰⁸ In the absence of a report, the conservation aims for SPAs are first specified in the statutory designation of the protected area. According to the BVerwG, habitat types and species that are not named in the declaration on the protected area or in the standard datasheet shall not be objects of the assessment, even if these are priority habitat types or species.¹⁰⁹ The Court holds that, in the case of SPAs, only an (appropriate) selection of European bird species from Annex I BD, corresponding to the reporting and site designation procedure, shall form the basis for the assessment.¹¹⁰ All habitat types that may develop only in the future or species that may migrate into the area are not considered at all in the appropriate assessment.¹¹¹

Based on Article 1 e) HD, the typical species in an affected habitat type are also relevant to the assessment, independent of whether they are named in the declaration on the protected area or in the standard datasheet.¹¹² However, the BVerwG has decided that not all characteristic species require inclusion in the appropriate assessment:¹¹³

*Those characteristic species shall be selected that exhibit a clear high abundance in the habitat type in question or the conservation of their populations must be directly linked to the conservation of the habitat type in question. The species must be relevant to the recognition and evaluation of adverse impacts, i.e. species shall be selected that possess an indicator function for potential effects of the proposed development on the habitat type.*¹¹⁴

¹⁰⁶ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68.

¹⁰⁷ cf. European Commission 2011.

¹⁰⁸ European Commission 2011, p. 39 (whereas no. 4).

¹⁰⁹ BVerwG, decision of 14.4.2011 – 4 B 77.09, margin number 36–39; adjudication of 17.1.2007 – 9 A 20.05, margin number 77 and headnote 14.

¹¹⁰ BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 50.

¹¹¹ cf. BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 45.

¹¹² BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 82; adjudication of 12.3.2008 – 9 A 3.06, margin number 79.

¹¹³ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 50; adjudication of 28.3.2013 – 9 A 22.11, margin number 80; adjudication of 6.11.2012 – 9 A 17.11, margin number 52.

¹¹⁴ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 52. Similar, e.g., to BVerwG, adjudication of 10.11.2016 – 9 A 18.15, margin number 71; adjudication of 28.3.2013 – 9 A 22.11, margin number 80; adjudication of 6.11.2013 – 9 A 14.12, margin number 54.

The responsible authority is given some discretionary power in the selection of species.¹¹⁵ Species that react particularly sensitively (e.g. acoustic or optical sensitivity to disturbance) to the effects of a project, or have high or very specific requirements of their habitat, are primarily of relevance, which is why the effects on the habitat type caused by the proposed development would not be adequately documented without their inclusion.¹¹⁶ Species that are higher up in the food chain can be used to make inferences on species that are lower down in the food chain and indirect estimates, based on bat and bird species, of the effects on, e.g., characteristic species of beetles, other insects or snails are therefore permissible according to the BVerwG.¹¹⁷ In practice, investigations in Germany are limited to a small number of species on a regular basis.¹¹⁸ The selected characteristic species are to be treated like species in Annex II HD in the further assessment.¹¹⁹

In individual cases, in addition to the conservation objectives, other elements of the site are to be included in the assessment if these are essential to a favourable conservation status due to the ecological structure and relationships (e.g. margins and buffer zones or species that are an indispensable food resource for the protected species).¹²⁰

3.5. Surveys and evaluation of abundance and condition of the protected habitat types and species

In order to be in a position to estimate the effects of a proposed development on the conservation objectives, the abundance and condition of the protected habitat types and species must be surveyed and evaluated. This also includes determining previous pressures on the site due to existing anthropogenic exploitation or long-range pollution, as well as natural changes, e.g. in the climate or water balance.¹²¹ The survey and evaluation methods must be based on the best relevant scientific knowledge in the field (see 3.3.1). The evaluation is to be carried out based on reliable and current data.¹²² According to

¹¹⁵ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 50; adjudication of 12.3.2008 – 9 A 3.06, margin number 78.

¹¹⁶ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 81; adjudication of 23.4.2014 – 9 A 25.12, margin number 51.

¹¹⁷ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 53.

¹¹⁸ cf. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 81; adjudication of 23.4.2014 – 9 A 25.12, margin number 51; adjudication of 13.5.2009 – 9 A 73.07, margin number 47; *Trautner* NuR 2010, 90, 92 *et seq.*

¹¹⁹ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 52; adjudication of 12.3.2008 – 9 A 3.06, margin number 79–82.

¹²⁰ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 77; adjudication of 18.7.2013 – 4 CN 3.12, margin number 30.

¹²¹ cf. BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 88; decision of 10.11.2009 – 9 B 28.09, margin number 3.

¹²² ECJ, adjudication of 11.9.2012 – C-43/10, margin number 115.

the BVerwG, older data may only be referred to if the natural and spatial features of the Natura 2000 site have remained largely unchanged and current data are being collected in the immediate area of intervention due to the proposed development.¹²³

With regard to the extent of the data collection and the method, the BVerwG approves a conservation-specific discretion for estimation,¹²⁴ which must, however, be limited to the choice of method and the selection of the characteristic species.¹²⁵ The data collection and evaluation must adhere to the statutory criteria, in particular those laid down in Article 1 e) and i) HD and Annex III Stage 1 HD.¹²⁶ For example, threats that are already present – e.g. due to the influx of nutrients or pesticides – do not justify the classification of a habitat type as an area for development that is worthy of lesser protection if, nevertheless, all characteristics that shape the type of habitat are present.¹²⁷ Furthermore, regular investigations on location cannot be dispensed with.¹²⁸ In addition, a mixture of different data collection methods may be necessary¹²⁹ to obtain a realistic picture of the numbers and condition of the protected species and their habitats.¹³⁰ Habitats used for reproduction and resting, as well as for feeding, including habitats only frequented at certain times of the year (e.g. overwintering quarters), and also the main paths and routes between these habitats are to be identified for mobile species of animals and their importance to the species is to be estimated.¹³¹ The investigations must not disturb the affected animals themselves in a disproportionate manner.¹³² They are to be limited to the required scope and are only to be carried out by experts, exerting the greatest possible level of care in relation to the affected specimens (especially their physical integrity) and the remaining animal and plant life.¹³³

Deficiencies in surveys or in the evaluation of abundance and condition basically render the entire appropriate assessment defective.¹³⁴ However, the BVerwG has decided that analogies, presumptions of truth and worst case scenarios can be used to bridge difficulties in the data collection, so long as the outcomes achieved through these tools err on the “safe side” with reference to the problems under investigation (see 3.3.2).

¹²³ cf. BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 63.

¹²⁴ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 47; adjudication of 14.7.2011 – 9 A 12.10, margin number 62; adjudication of 12.3.2008 – 9 A 3.06, margin number 75.

¹²⁵ cf. critique in *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 21.

¹²⁶ cf. European Commission 2012a, p. 6 *et seq.*

¹²⁷ BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 62 *et seq.*

¹²⁸ cf. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 52.

¹²⁹ In bats, e.g. comprehensive bioacoustic surveys along transects, automated acoustic surveys using batcorders and sound recorders, as well as netting and searches for roosts.

¹³⁰ cf. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 47 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 92.

¹³¹ cf. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 47 *et seq.* on bats.

¹³² BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 47.

¹³³ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 33.

¹³⁴ cf. BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 64–67.

The BVerwG views both a faunistic potential analysis of the landscape¹³⁵ and monitoring that has been only been scheduled for the future as inadequate.¹³⁶

3.6. Determination of the potential negative effects

All potential effects of a project or plan for which significant adverse impacts on the integrity of a Natura 2000 site cannot be excluded without remaining reasonable scientific doubts beforehand are to be determined within the scope of the appropriate assessment.¹³⁷ Not only an analysis of the relevant factors associated with the proposed development that may have an impact, but also a forecast of the negative effects on the Natura 2000 site concerned are required, as the assessment must be carried out before the project is realised (see 3.1.).¹³⁸ The data collection must also include impacts outside the boundaries of the site and indirect effects, if these can be attributed to the project (see 2.1).¹³⁹ Minor impacts are also to be determined, as a significant adverse effect on the site may result due to the specific situation pertaining in the site, previous pressures on the site, or the cumulative effects of other developments.¹⁴⁰ Comprehensive data must also be collected on effects if they will clearly have a significant adverse impact on a Natura 2000 site,¹⁴¹ as the findings of the appropriate assessment must always be complete, precise and conclusive and the full conduct of the appropriate assessment is prerequisite to a derogating decision under Article 6(4) HD (see 4).

In particular, certain types of negative effects occur regularly in association with proposed developments. The following examples are highlighted:

- Loss of land in the site due to construction works and installations, resulting in the destruction of, or adverse impacts on, types of habitat and habitats and territories occupied by some species,¹⁴²
- Effects of fragmentations in sites or of barriers both within the site as well as in relation to habitats or populations outside the site, especially in the case of

¹³⁵ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 51 *et seq.*

¹³⁶ BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 105 and headnote 6.

¹³⁷ ECJ, adjudication of 7.9.2004 – C-127/02, margin number 54; BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68; European Commission 2001, p. 20 *et seq.*; European Commission 2012a, p. 5 *et seq.*

¹³⁸ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 46.

¹³⁹ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 11. More detailed analysis in Möckel Nature Conservation 2017c.

¹⁴⁰ cf. ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 56–63.

¹⁴¹ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 54.

¹⁴² cf. ECJ, adjudication of 11.4.2013 – C-258/11, margin number 37 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 97 *et seq.*; adjudication of 14.1.2016 – C-141/14, margin number 63 *et seq.*

roads, railway lines and waterways, but also e.g. in the case of larger scale wind power plants or opencast mining,¹⁴³

- Risk of collisions due to, for example, the operation of roads and railways or wind energy systems,¹⁴⁴
- Changes to the water balance in the landscape through, for example, a reduction in the groundwater level or changes to/diversions of water bodies in favour of, e.g., roads or railways, mines, energy production, drinking water production or agriculture,¹⁴⁵
- Emissions of noise, vibration, light and compounds within or into the site from the outside, such as nitrogen emissions from roads, power plants or agricultural land or chloride emissions from roads due to winter salting,¹⁴⁶
- Human presence.¹⁴⁷

Furthermore, an appropriate assessment that is oriented towards conservation objectives and focuses on effects is only possible if other negative effects are also considered in addition to the impacts caused by the proposed development.¹⁴⁸ In spite of the project-specific approach of the assessment, the appropriate assessment must not only determine the current pressures due to previous land use, developments that have been realised and long-range pollution, but also the potential adverse impact of other expected, but not yet realised projects and plans under Article 6(3) HD.¹⁴⁹

3.7. Assessment of significance

Projects and plans are not permitted to have significant impacts on the integrity of Natura 2000 sites, either individually, or in combination with other plans and pro-

¹⁴³ cf. ECJ, adjudication of 20.5.2010 – C-308/08, margin number 25; adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; adjudication of 14.1.2016 – C-141/14, margin number 59, 75.

¹⁴⁴ cf. ECJ, adjudication of 20.5.2010 – C-308/08, margin number 37–52.

¹⁴⁵ cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*

¹⁴⁶ *Nitrogen*: ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23, adjudication of 11.9.2012 – C-43/10, margin number 98 *et seq.*; *Chloride*: BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 36 *et seq.*; adjudication of 14.7.2011 – 9 A 12.10, margin number 78. *Noise/vibration*: ECJ, adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; cf. ECJ, adjudication of 10.11.2016 – C-504/14, margin numbers 35, 53; *Light/optical disturbance*: BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 74–76; adjudication of 23.4.2014 – 9 A 25.12, margin number 51; cf. ECJ, adjudication of 10.11.2016 – C-504/14, margin numbers 35, 53, 101 *et seq.*, 114.

¹⁴⁷ cf. ECJ, adjudication of 10.11.2016 – C-504/14, margin numbers 35, 53, 64.

¹⁴⁸ cf. BVerwG, decision of 10.11.2009 – 9 B 28.09, margin number 3.

¹⁴⁹ Möckel *Nature Conservation* 2017a.

jects, which therefore requires an assessment of the compatibility with the conservation objectives that have been defined for the site concerned. The assessment of significant effects raises a lot of detailed questions and will therefore be examined in greater detail in a separate contribution.¹⁵⁰

A significant adverse effect does not need to have taken place, rather more, the possibility that it is “likely to have” a significant impact is sufficient under Article 6(3) HD.¹⁵¹ Any threat of a disadvantageous adverse effect on the conservation objectives is essentially significant and must be rated as having “an adverse effect on the integrity of a site”, whereby the probability that significant adverse impacts may arise from a proposed development is sufficient.¹⁵² Hence, the recognition of thresholds related to bagatelles and irrelevance by the BVerwG is to be viewed as critical in this process as these undermine protection of the sites in the medium to long term.¹⁵³ Due to the basic requirements, a proposed development is permissible if no reasonable doubt remains that significant adverse impacts will be avoided based on the best scientific knowledge in the field (see 3.1).

Significance is a conservation-specific question that must be solved based on the circumstances of each individual case, without social or economic reflections, which must only be considered within the scope of a derogating approval in accordance with Article 6(4) HD. The crucial criterion for the evaluation of significance is the favourable conservation status based on the conservation objectives for protected habitats and species under Article 1 e) and i) HD.¹⁵⁴ Therefore, the type, scope and duration of adverse impacts is decisive to the question of significance. Permanent land loss due to land use change or intensification essentially always constitutes a significant adverse impact on protected habitat types, as a prerequisite to the favourable conservation status for a habitat type is that the area it covers in the site is stable or expanding.¹⁵⁵ In the case of protected species, adverse impacts must never disturb the species-specific population dynamics to such an extent that a species can no longer form a viable component of the natural habitat that it belongs to and continue to do so in the long

¹⁵⁰ see Möckel Nature Conservation 2017a.

¹⁵¹ cf. ECJ, adjudication of 24.11.2011 – C-404/09 margin number 144.

¹⁵² cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 20; adjudication of 7.9.2004 – C-127/02, margin number 49; adjudication of 10.11.2016 – C-504/14, margin number 29; adjudication of 14.1.2016 – C-399/14, margin number 42 *et seq.*; adjudication of 14.1.2016 – C-141/14, margin number 58; adjudication of 24.11.2011 – C-404/09, margin number 142.

¹⁵³ More detailed to this questions Möckel Nature Conservation 2017a.

¹⁵⁴ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 21; adjudication of 11.4.2013 – C-258/11, margin number 39; BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 28; adjudication of 12.3.2008 – 9 A 3.06, margin number 94; adjudication of 17.1.2007 – 9 A 20.05, margin number 42 *et seq.*

¹⁵⁵ cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*; BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 124–126; adjudication of 17.1.2007 – 9 A 20.05, margin number 50. cf. ECJ, adjudication of 11.4.2013 – C-258/11, margin number 43, 46; adjudication of 14.9.2006 – C-244/05, margin number 46.

term.¹⁵⁶ Relevant factors are the habitat areas of the protected species, including their important areas for withdrawal, resting, nesting and feeding,¹⁵⁷ as well as their conservation status and their potential for improvement (cf. Article 1(i) HD). For this reason, even developments outside a Natura 2000 site may constitute adverse impacts that are pertinent to the assessment (see 2.1).

4. Consequences of a defective appropriate assessment

In accordance with the ECJ, an appropriate assessment that has been carried out under Article 6(3) HD is not appropriate if it is fragmentary and does not contain complete, precise and conclusive findings that are suited to the exclusion of any reasonable scientific doubt in relation to the effects on the integrity of the site in question (see 3.1). An inadequate survey of abundance and condition of the protected habitat types and species already constitutes a notable contravention that poses an obstacle to a proposed development and also to a derogating approval.¹⁵⁸ The documentation from the assessment must contain sufficient information to allow checks on whether the impacts were actually evaluated.¹⁵⁹ Failing this, according to the ECJ, the assumption must be made that not all perspectives relating to the plan or project have been ascertained under consideration of the best scientific knowledge in the field and that the authorities have also not gained the necessary certainty.¹⁶⁰ It is the responsibility of the national courts to carry out a comprehensive examination of whether the appropriate assessment complies with the requirements.¹⁶¹

In the event that the appropriate assessment and its documentation have not been carried out correctly and comprehensively, this not only contravenes Article 6(3) HD, but also means that no derogating approval can be granted as the knowledge on the compatibility or incompatibility with the conservation objectives defined for the site concerned constitutes an indispensable condition for the application of Article 6(4) HD.¹⁶² This is the only way in which the weighing up of the interests in the integrity of the site

¹⁵⁶ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 45. cf. ECJ on potential SCIs, adjudication of 24.11.2011 – C-404/09, margin number 163; adjudication of 20.5.2010 – C-308/08, margin number 21; adjudication of 14.9.2006 – C-244/05, margin number 46.

¹⁵⁷ ECJ, adjudication of 2.8.1993 – C-355/90, margin number 36; BVerwG, adjudication of 1.4.2004 – 4 C 2.03, JURIS, margin number 45; adjudication of 21.6.2006 – 9 A 28.05, margin number 43.

¹⁵⁸ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 117 and headnote 7; adjudication of 20.9.2007 – C-304/05, margin number 69.

¹⁵⁹ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 103.

¹⁶⁰ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 106 *et seq.*

¹⁶¹ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 44; adjudication of 24.11.2011 – C-404/09, margin number 100; BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 38.

¹⁶² settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 56 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 11.4.2014 – C-258/11 margin number 35; adjudication of 16.2.2012 – C-182/10 margin number 74 *et seq.* Similar to, e.g. BVerwG, adjudication of 1.4.2015 – 4 C 6.14, margin number 27; adjudication of 10.4.2013 – 4 C 3.12, margin numbers 10 and 20; adjudication of 17.01.2007 – 9 A 20.05, margin number 114 and headnote 15.

and the public interests, as well as of the different alternatives, and an appropriate determination of the compensatory coherence measures is possible.¹⁶³ However, the BVerwG has recognised the option of using a presumption of truth/worst case scenario within the scope of a derogation assessment as an aid to imputing significant qualitative and quantitative adverse impacts.¹⁶⁴ This may result in appropriate outcomes in derogating decisions, but does not solve the difficulties in relation to defining the required coherence measures. In this sense, doubts about the compatibility with ECJ case law are apposite.

5. Conclusions

The importance of the European ecological network Natura 2000 lies not only in the number of its sites and the size of the area that is protected, but crucially also in the appropriate assessment carried out for all potentially impacting projects and plans. In particular, in conjunction with the other strict requirements laid down in Article 6(3) HD, clarification by the ECJ on the distribution of the risks associated with the determination and forecasting of impacts that count against the proposed development has resulted in a high level of protection for Natura 2000 sites. This is so high that the level of protection is sometimes regarded as too strict as it imposes restrictions that are viewed as excessive on social and economic liberties and developments. This neglects the fact that the Natura 2000 network is quite rightly given a prominent standing in the protection of biological diversity as it is designed to safeguard the common natural heritage of the European Union¹⁶⁵ and that nature conservation often get the short end of the weighing up with economic interests.¹⁶⁶ This heritage continues to be threatened by the persistent negative development of biodiversity in the EU and in Germany, such that every effort to protect it is required. In contrast, Natura 2000 hardly poses a great threat to economic development in the EU as most of the EU Member States have a very comprehensive network of infrastructure¹⁶⁷ made up of motorways, railways, navigable waterways, airports, industrial and commercial estates, etc., and additional infrastructure measures are possible within the scope of Article 6(4) HD.¹⁶⁸ Insofar as critics complain and find fault with the fact that appropriate assessments may be abused by citizens who are affected, stating that animals and plants now receive more protection than humans, this just simply misunderstands cause and effect. The cause of this use is need of the affected citizens for protection from noise,

¹⁶³ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 16.2.2012 – C-182/10, margin number 75; adjudication of 11.9.2012 – C-43/10, margin number 114. Similar to BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 114 *et seq.*

¹⁶⁴ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 99; decision of 17.7.2008 – 9 B 15.08, margin number 24.

¹⁶⁵ ECJ, adjudication of 10.5.2007 – C-508/04, margin number 57.

¹⁶⁶ Bastmeijer 2016, p. 387 (399 *et seq.*); Schoukens/Cliquet E&S 2016, 10 (p. 2 *et seq.*, 9 *et seq.*).

¹⁶⁷ cf. Ibsch *et al.* science 2016, 1423 *et seq.*

¹⁶⁸ Möckel Nature Conservation 2017b.

pollutants and other adverse impacts on their environment, including on the scenery. Based on the current legal position in the EU, their interests are only to be taken into consideration on a regular basis within the scope of an assessment carried out during decisions made by the authorities. In these cases, the fact that no significant adverse impacts are to be expected under consideration of the best relevant scientific insights is not an obligatory condition for the authorisation of a proposed development. Utilisation of Natura 2000 conservation legislation thus reflects only the deficits in relation to the protection of citizens.

Acknowledgements

The author thanks the reviewers for their very helpful comments and suggestions and Textworks Translations for the translation of the manuscript and the cited sections of decisions of the BVerwG.

References

- Balla S, Müller-Pfannenstiel K, Uhl R, Kiebel A, Lüttmann J, Lorentz H, Düring I, Schlutow A, Schleuschner T, Förster M, Becker C, Herzog W (2013) Untersuchung und Bewertung von straßenverkehrsbedingten Nährstoffeinträgen in empfindliche Biotope - Bericht zum FE-Vorhaben 84.0102/2009 der Bundesanstalt für Straßenwesen. Bundesanstalt für Straßenwesen, Forschung Straßenbau und Straßenverkehrstechnik Band Bd. 1099. Fachverl. NW in der Carl-Schünemann-Verl. GmbH, Bremen, 364 pp.
- Bastmeijer K (2016) Ecological restoration in international biodiversity law: a promising strategy to address our failure to prevent? In: Bowman M, Davies P, Goodwin E (Ed.) *Research Handbook on Biodiversity and Law*. Edward Elgar, Cheltenham, 387–413. <https://doi.org/10.4337/9781781004791.00024>
- EEA [European Environment Agency] (2015) State of nature in the EU: Results from reporting under the nature directives 2007–2012. EEA Technical report Band No 2/2015, 178 pp.
- European Commission (2000) Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, 73 pp.
- European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 81 pp.
- European Commission (2011) Commission Implementing Decision of 11 July 2011 concerning a site information format for Natura 2000 sites (notified under document C(2011) 4892). Band 2011/484/EU: 39–70.
- European Commission (2012a) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC, 30 pp.
- European Commission (2012b) Guidance on Aquaculture and Natura 2000, 89 pp.

- European Commission (2014) Farming for Natura 2000 - Guidance on how to support Natura 2000 farming systems to achieve conservation objectives, based on Member States good practice experiences, 145 pp.
- European Commission (2015a) Natura 2000 and Forests - Part I-II. Technical Report Band 2015–088, 114 pp.
- European Commission (2015b) The State of Nature in the European Union - Report on the status of and trends for habitat types and species covered by the Birds and Habitats Directives for the 2007–2012 period as required under Article 17 of the Habitats Directive and Article 12 of the Birds Directive. COM(2015) 219 final, 19 pp.
- European Commission (2017) Nature and Biodiversity Newsletter NATURA 2000. Band 41, 16 pp.
- Floor JR, van Koppen CSA, van Tatenhove JPM (2016) Uncertainties in the assessment of "significant effect" on the Dutch Natura 2000 Wadden Sea site - The mussel seed fishery and powerboat race controversies. *Environmental Science & Policy* 55: 380–392. <https://doi.org/10.1016/j.envsci.2015.03.008>
- Fretzer S (2016) Using the Ecopath approach for environmental impact assessment—A case study analysis. *Ecological Modelling* 331: 160–172. <https://doi.org/10.1016/j.ecolmodel.2015.09.022>
- Ginige T, Thornton A, Ball F (2010) The severn tidal barrage project: A legal paradox? *Journal of Water Law* 21: 66–77.
- Haumont F (2015) Appropriate impact assessment. In: Born C-H, Cliquet A, Schoukens H, Misonne D, Van Hoorick G (Eds) *The Habitats Directive in its EU Environmental Law Context - European Nature's Best Hope?*, Routledge Research in EU Law. Routledge, London, New York, 93–100.
- Hernando A, Tejera R, Velazquez J, Nunez MV (2010) Quantitatively defining the conservation status of Natura 2000 forest habitats and improving management options for enhancing biodiversity. *Biodiversity and Conservation* 19: 2221–2233. <https://doi.org/10.1007/s10531-010-9835-8>
- Ibisch PL, Hoffmann MT, Kreft S, Pe'er G, Kati V, Biber-Freudenberger L, DellaSala DA, Vale MM, Hobson PR, Selva N (2016) A global map of roadless areas and their conservation status. *Science* 354: 1423–1427. <https://doi.org/10.1126/science.aaf7166>
- Jackson ALR (2014) Bund Naturschutz in Bayern Revisited: The Required Standard of Protection under the EU's Habitats Directive Prior to a Site's Adoption as a Site of Community Importance. *Journal of Environmental Law* 26: 495–506. <https://doi.org/10.1093/jel/equ029>
- Lambrecht H, Trautner J (2007) Fachinformationssystem und Fachkonventionen zur Bestimmung der Erheblichkeit im Rahmen der FFH-VP. Bundesamt für Naturschutz. Bonn, 239 pp. http://www.bfn.de/fileadmin/MDB/documents/themen/natura2000/bfn-fue_ffh-fkv_bericht_und_anhang_juni__2007.zip
- Landmann Rv, Rohmer G (2016) *Umweltrecht*, volume II: KrW-/AbfG, BBodSchG, BNatSchG, PRTR-Gesetz. loose-leaf. ed., C.H. Beck, Munich, 81, supplement consignment.
- Lawton RN (2007) Ecological compensation within the UK planning system: Effects of Article 6(4) of the habitats directive on three South Coast port developments. *Journal of Water Law* 18: 47–57.

- McGillivray D (2011) Mitigation, Compensation and Conservation: Screening for Appropriate Assessment under The EU Habitats Directive. *Journal for European Environmental & Planning Law* 2011: 329–352. <https://doi.org/10.1163/187601011X604230>
- Milieu, IEEP, ICF (2016) Evaluation Study to support the Fitness Check of the Birds and Habitats Directives, 668 pp.
- Möckel S (2014) 35 Years of the EU Birds Directive in the Light of the Court Practice of the European Court of Justice and the German Federal Administrative Court. *Journal for European Environmental & Planning Law* 11: 392–418. <https://doi.org/10.1163/18760104-01104005>
- Möckel S (2017a) The assessment of significant effects on the integrity of “Natura 2000” sites under Article 6(2) and 6(3) of the Habitats Directive. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 57–85. <https://doi.org/10.3897/natureconservation.23.13602>
- Möckel S (2017b) The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 87–116. <https://doi.org/10.3897/natureconservation.23.13603>
- Möckel S (2017c) The terms “project” and “plan” in the Natura 2000 appropriate assessment. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 31–56. <https://doi.org/10.3897/natureconservation.23.13601>
- Opdam PFM, Broekmeyer MEA, Kistenkas FH (2009) Identifying uncertainties in judging the significance of human impacts on Natura 2000 sites. *Environmental Science & Policy* 12: 912–921. <https://doi.org/10.1016/j.envsci.2009.04.006>
- Palerm J (2006) The Habitats Directive as an instrument to achieve sustainability? An analysis through the case of the Rotterdam mainport development project. *European Environment* 16: 127–138. <https://doi.org/10.1002/eet.413>
- Peterson K, Kose M, Uustal M (2010) Screening decisions concerning the likely impacts of plans and projects on natura 2000 sites. *Journal of Environmental Assessment Policy and Management* 12: 185–214. <https://doi.org/10.1142/S1464333210003553>
- Schoukens H, Cliquet A (2016) Biodiversity offsetting and restoration under the European Union Habitats Directive: Balancing between no net loss and deathbed conservation? *Ecology and Society* 21(4): 10. <https://doi.org/10.5751/ES-08456-210410>
- Sobotta C (2017) The European Union legal boundaries for semi-natural habitats management in Natura 2000 sites. *Journal for Nature Conservation* (in press): 1–7. <https://doi.org/10.1016/j.jnc.2017.07.003>
- Söderman T (2009) Natura 2000 appropriate assessment: Shortcomings and improvements in Finnish practice. *Environmental Impact Assessment Review* 29: 79–86. <https://doi.org/10.1016/j.eiar.2008.04.001>

- Sundseth K, Roth P (2013) Study on Evaluating and Improving the Article 6.3 Permit Procedure for Natura 2000 Sites. Europäische Kommission, 104 pp. http://ec.europa.eu/environment/nature/natura2000/management/docs/AA_final_analysis.pdf
- Therivel R (2009) Appropriate assessment of plans in England. *Environmental Impact Assessment Review* 29: 261–272. <https://doi.org/10.1016/j.eiar.2009.01.001>
- Trautner J (2010) Die Krux der charakteristischen Arten - Zu notwendigen und zugleich praktikablen Prüfungsanforderungen im Rahmen der FFH-Verträglichkeitsprüfung. *Natur und Recht* 32: 90–98. <https://doi.org/10.1007/s10357-010-1808-x>
- Trouwborst A (2016) Countering fragmentation of habitats under international wildlife regimes. In: Bowman M, Davies P, Goodwin E (Eds) *Research Handbook on Biodiversity and Law*. Edward Elgar, Cheltenham: 219–244. <https://doi.org/10.4337/9781781004791.00016>
- Ureta AG (2007) Habitats Directive and Environmental Assessment of Plans and Projects. *Journal for European Environmental & Planning Law* 2: 84–94.
- Wulfert K, Lau M, Widdig T, Müller-Pfannenstiel K, Mengel A (2015) Standardisierungspotenzial im Bereich der arten- und gebietsschutzrechtlichen Prüfung, FuE-Vorhaben FKZ 3512 82 2100 im Auftrag des BfN. BfN, 456 pp. http://www.bfn.de/fileadmin/BfN/eingriffsregelung/Dokumente/Standardisierungspotenzial_Arten-_und_Gebietsschutz_1.pdf
- Zehetmair T, Muller J, Runkel V, Stahlschmidt P, Winter S, Zharov A, Gruppe A (2015) Poor effectiveness of Natura 2000 beech forests in protecting forest-dwelling bats. *Journal for Nature Conservation* 23: 53–60. <https://doi.org/10.1016/j.jnc.2014.07.003>

The terms “project” and “plan” in the Natura 2000 appropriate assessment

Stefan Möckel¹

¹ Helmholtz Centre for Environmental Research – UFZ, Department of Environmental and Planning Law, Leipzig, Germany

Corresponding author: *Stefan Möckel* (stefan.moeckel@ufz.de)

Academic editor: *Jukka Similä* | Received 9 May 2017 | Accepted 17 August 2017 | Published 14 December 2017

<http://zoobank.org/9F0A3402-4B2D-419C-B8EF-29467A466232>

Citation: Möckel S (2017) The terms “project” and “plan” in the Natura 2000 appropriate assessment. In: Möckel S (Ed.) Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law. Nature Conservation 23: 31–56. <https://doi.org/10.3897/natureconservation.23.13601>

Abstract

The Natura 2000 appropriate assessment for impacting projects or plans under Article 6(3) HD is the central statutory instrument for the protection of Sites of Community Importance (SCI) and the Special Protection Areas (SPA). The decisive factor in whether or not an appropriate assessment is required depends on the question of whether a project or plan is present within the meaning of Article 6(3) of the Habitats Directive 92/43/EEC¹ (HD). The Habitats Directive does not define these terms in any more detail, which is why they must be specified more closely through interpretation. This paper will present the definitions given by the European Court of Justice (ECJ)² case law and national courts like the German Federal Administrative Court (BVerwG)³ and discuss the consequences and practical scope of the terms. The focus of the following investigation will be on the term “project”. This is because for “plans”, the envisaged projects are essentially also decisive, given that only these can have significant adverse effects on the conservation objectives. There are a variety of questions regarding when a human activity constitutes a project and under which conditions Member States could exempt activities from the requirement for an assessment. This article will start with an outline of the temporal scope of the appropriate assessment and,

¹ Council Directive 92/43/EEC of 21.5.1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.7.1992, p. 7.

² All ECJ decisions can be located based on their file number and can be freely accessed under: eur-lex.europa.eu/juris/recherche.jsf?language=en.

³ From 2002 onwards, BVerwG decisions can be located based on their file number and can be freely accessed under: <http://www.bverwg.de/entscheidungen/entscheidungen.php>. References to the locations of earlier decisions are provided in this article.

following this, briefly explore the scope of plans or projects directly connected with or necessary to the management of the site, as they are not the subject of an assessment.

Keywords

European Union (EU), Natura 2000, appropriate assessment, impact assessment, Article 6(3) Habitats Directive, legal term definitions, project, plan, agriculture, forestry, recurrent measures, case law, ECJ, Germany, BVerwG

I. Introduction

The habitats and species that are to be protected by Natura 2000 are the common heritage of the European Community, which is why the Birds Directive and the Habitats Directive envisage specially targeted and enhanced conservation provisions and measures.⁴ The central statutory instrument for the protection of the Natura 2000 sites is the appropriate assessment for impacting projects or plans pursuant to Article 6(3) HD. The appropriate assessment must take place prior to the authorisation and implementation of a project or plan (*ex ante*).⁵ The assessment procedure contains two main steps:⁶

The first step is the compulsory examination of whether an appropriate assessment is actually required for a project or a plan in the sense of Article 6(3) HD and does not serve the immediate purpose of management of the site. A screening process must involve the examination of whether significant adverse impacts on a Natura 2000 site are to be expected. If this is the case, the authorities must assess the compatibility of the project or plan in a second step. Compatibility can only be ascertained if it concerns in relation to significant adverse impacts on the site can be ruled out without any reasonable scientific doubts remaining. If this cannot be demonstrated, then the national authorities shall not approve the plan or project. They can only permit the proposed development through a derogating approval⁷ pursuant to Article 6(4) HD.

The decisive factor in whether or not an appropriate assessment is required based on European Law is thus dependent on the question of whether a project or plan exists within the meaning of Article 6(3) HD. The Habitats Directive does not define these terms in any more detail, which is why they must be specified more closely through interpretation. Numerous ECJ decisions and opinions from the literature and national courts are now available on this topic.

⁴ ECJ, adjudication of 23.5.1990 – C-169/89, margin number 11; adjudication of 11.7.1996 – C-44/95, margin number 23, 26; adjudication of 28.6.2007 – C-235/04, margin number 23; adjudication of 13.7.2006 – C-191/05, margin number 9; adjudication of 25.10.2007 – C-334/04, margin number 24.

⁵ ECJ, adjudication of 14.1.2010 – C-226/08, margin number 48 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 125, 174.

⁶ Möckel Nature Conservation 2017b.

⁷ elaborated on in Möckel Nature Conservation 2017a.

In the following, the debate will only briefly enter into the term “plan” (see 5). This is because the proposed developments that are envisaged in the plan are decisive here, given that only these projects can have significant adverse effects on the conservation objectives. The focus of the investigation is thus on the term “project” in paragraph 6. In relation to this, there are a variety of questions regarding differentiation from other human actions and the ECJ has repeatedly needed to counteract national attempts to use and apply restrictive definitions of the term “project”. Most of the questions discussed in paragraph 6 for projects also apply to plans.⁸ Prior to entering into the two terms, the main causes of the frequent unfavourable conservation statuses (see 2) and the temporal scope of the appropriate assessment will be briefly outlined (see 3), because both are relevant for the definitions of the terms.

2. Causes of unfavourable conservation statuses

The aim of the Habitats Directive and the Birds Directive is to maintain or restore a favourable conservation status for the specifically protected habitats and species within the biogeographical region (Article 2(2) HD, Articles 2 and 3(1) Birds Directive). In the second reporting period from 2007 to 2012, a favourable status had only been achieved for 16 percent of habitat types and 23 percent of species by 2012.⁹ In spite of the additional obligations for protection and improvement laid down in the Water Framework Directive, the proportion of species with an unfavourable conservation status is highest in inland waters.¹⁰ In relation to habitat types, dunes, grassland, wetlands and marshland, forests and coastal waters exhibit the highest level of unfavourable conditions.¹¹

One of the main reasons is that the great majority of Natura 2000 sites are not wild areas, but are frequently sites in historical landscapes or in the cultural landscapes of the present, such that there are a variety of conflicts in relation to land use, changes in land use and social development.¹² Anthropogenic uses within or adjacent to the sites are the norm. The main uses in Natura 2000 sites are agriculture, forestry and fisheries. Agricultural land use practices (e.g. ploughing up of grassland, use of fertilisers and plant protection products) and anthropogenic changes to natural conditions (e.g. drainage measures, removal of landscape elements) have caused the greatest pressures and threats to the specially protected habitats and species in terrestrial ecosystems, including inland waters.¹³ Fishing and harvesting of shellfish, as well as pollution, are

⁸ cf. *Therivel* Environmental Impact Assessment Review 2009, 261 *et seq.*

⁹ European Commission 2015.

¹⁰ European Commission 2015, p. 8.

¹¹ European Commission 2015, p. 15.

¹² EEA 2015, p. 135 *et seq.*

¹³ EEA 2015, p. 6 *et seq.*, 70 *et seq.*, 96 *et seq.*, 151 *et seq.*; European Commission 2015, p. 12.

among the most common causes in marine systems.¹⁴ Apart from this, Natura 2000 sites are also used for tourism, local recreation and water management. Since 2010, the European Commission has issued guidelines for Natura 2000 on the handling of different competing anthropogenic uses.¹⁵

The fact that conditions have hardly improved since the first reporting period can be explained, on the one hand, by the substantial deficiencies in the implementation of protection by Member States but also, on the other hand, by inadequate prioritisation.¹⁶ For example, in spite of the disproportionately high importance of agriculture and forestry, comparatively few measures have been implemented in relation to this within and outside the boundaries of Natura 2000 sites and the focus has been on the designation of protected areas and the issuing of statutory conservation provisions.¹⁷ In this process, the European Commission sees a requirement for an ecologisation of competing land uses: “if we want to conserve Europe’s natural capital, then agriculture, energy and transport policies must be sustainable too”¹⁸. However, the Commission only partially prevailed in 2013 with its proposals for a greener Common Agricultural Policy. Scientists attest that the new greening requirements for direct agricultural payments,¹⁹ which apply from 2015 to 2020, only harbour minimal potential for improvements to nature and the environment in Europe and Germany.²⁰

3. Temporal scope of the appropriate assessment

The requirement for an appropriate assessment of new plans and projects applies for all Sites of Community importance (SCIs) when these sites have been included in one of the European Commission biogeographical lists of sites pursuant to Article 4(2) subsection 3 HD.²¹ Protection at the national level, which is enforced by Article 4(4) HD, is not required for applicability. In addition, the appropriate assessment replaces the examination pursuant to Article 4(4) BD, if a Special Protection Area (SPA) is

¹⁴ European Commission 2015, p. 13; EEA 2015, p. 101 *et seq.*

¹⁵ accessible on http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm.

¹⁶ cf. Milieu, IEEP and ICF 2016; Vassiliki *et al.* CoBi 2015, 260 (266 *et seq.*).

¹⁷ EEA 2015, p. 132 *et seq.*

¹⁸ http://ec.europa.eu/environment/nature/index_en.htm (accessed on 27.11.2015).

¹⁹ Articles 43–47 and Annex X of Regulation (EU) no. 1307/2013 with provisions on direct payments to proprietors of farms within the scope of the Common Agricultural Policy funding regulations, ABl. EU no. 347 v. 20.12.2013, p. 608 *et seq.*

²⁰ cf. Underwood/Tucker 2016; Pe'er *et al.* Conservation Letters 2016, 1 *et seq.*; Pe'er *et al.* Science 2014, 1090 *et seq.*

²¹ ECJ, adjudication of 13.1.2005 – C-117/03, margin number 25; adjudication of 11.9.2012 – C-43/10 margin number and headnote 6.

legally designated in accordance with Article 7 HD.²² This is beneficial for projects and plans.²³ Article 6(3) and (4) HD do not apply in the case of potential SCIs and non-designated SPAs, but Member States are required to take protective measures for potential SCIs and must fulfill their duties in line with Article 4(4) BD.²⁴

Therefore, in general, projects and plans authorised prior to the listing of SCIs or prior to the legal designation of SPAs do not need a subsequent appropriate assessment, even if they were realised afterwards.²⁵ However, after the listing of SCIs or the designation of SPAs, the realisation and operation of these authorised projects or plans are subject to Article 6(2) HD, which prohibits changes and disturbance in the Natura 2000 sites.²⁶ According to the ECJ, Article 6(2) and (3) HD provide a similar level of protection.²⁷

In relation to SCIs, the German BVerwG asked the ECJ whether a subsequent appropriate assessment comparable to that in Article 6(3) HD is still to be carried out and – if yes – what standards are to be set and whether the reasons for derogation given in Article 6(4) HD are applicable.²⁸ The ECJ has answered these questions fully within the meaning of a comprehensive protection of integrity for Natura 2000 sites.²⁹ In cases where a subsequent review of the implications for the site constitutes the only appropriate step for avoiding the implementation of the plan or project referred to, resulting in deterioration or disturbance that could be significant in view of the objectives of that directive, a subsequent appropriate assessment equivalent to Article 6(3) HD must also be carried out within the scope of Article 6(2) HD.³⁰ However, the ECJ also stipulates that Member States have the option, by analogy with the derogation procedure provided for in Article 6(4) HD, of invoking reasons of overriding public interest and, if the conditions laid down by that provision are essentially satisfied, of authorising a plan or project which could otherwise have been

²² ECJ, adjudication of 24.11.2011 – C-404/09, margin number 97; adjudication of 13.12.2007 – C-418/04, margin number 173.

²³ more detailed in *Möckel* JEEPL 2014, 392 (402 *et seq.*, 405 *et seq.*); *Ureta* JEEPL 2007, 84 (86).

²⁴ for SCI: ECJ, adjudication of 13.1.2005 – C-117/03, margin number 22 *et seq.*; adjudication of 15.3.2012 – C-340/10, margin number 43–47; for SPA: ECJ, adjudication of 18.10.1989 – C-374/87, margin number 50–56; adjudication of 13.12.2007 – C-418/04, margin number 173; adjudication of 24.11.2011 – C-404/09, margin number 97.

²⁵ *cf.* only ECJ, adjudication of 14.1.2016 – C-399/14 – *Grüne Liga Sachsen*, margin number 33.

²⁶ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 33; adjudication of 24.11.2011 – C-404/09, margin number 124 *et seq.*; adjudication of 14.1.2010 C-226/08, margin number 49; BVerwG, decision of 6.3.2014 – 9 C 6.12, margin number 22, 26 *et seq.*

²⁷ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 52; adjudication of 15.5.2014 – C-521/12, margin number 19.

²⁸ BVerwG, decision of 6.3.2014 – 9 C 6.12.

²⁹ for n by *McGillivray* JEEPL 2011, 329 (352) and *Schoukens* JEEPL 2014, 1 (26 *et seq.*).

³⁰ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 42–54.

regarded as prohibited by Article 6(2) HD.³¹ In these cases, a subsequent review that meets the requirements of Article 6(3) HD is always necessary,³² as a full appropriate assessment is a compulsory condition for a derogation decision under Article 6(4) HD according to settled ECJ case law.³³ However, the possibility of a subsequent derogation analogue to Article 6(4) HD does not exist for projects and plans in belatedly designated SPAs, because Member States are not permitted to gain any advantages from the violation of their obligations in relation to designations under Article 4(1) and (2) BD.³⁴ In belatedly designated SPAs, derogations are only possible within the scope of Article 4(4) BD, which is significantly more restrictive due to the settled case law of the ECJ.³⁵

In the subsequent review, standards must neither be changed for the appropriate assessment, nor for the derogation procedure, even in the case of proposed developments that have already been realised. Instead, a full assessment is to be carried out on the proposed development, considering all circumstances that have occurred up to the date of inclusion and also all implications arising or likely to arise following the partial or total implementation of the plan or project on the site in question after that date.³⁶ For SCIs, the same applies to the derogating procedure, which must take into account overriding public interests and potential alternatives based on the current situation.³⁷ In the event that the assessment cannot rule out incompatibility with certainty and the conditions for a derogation equivalent to Article 6(4) HD or to Article 4(4) BD are also absent, approved proposed developments are to be stopped due to inadmissibility, installations with an adverse impact are to be demolished and the approval issued by the authorities is to be revoked. This legal consequence is not disproportionate in relation to the protection of Natura 2000 sites as the common heritage of the European Community and there is also no assurance for projects and plans that the law will remain unchanged.³⁸ The ECJ made clear, that National procedural law and

³¹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 55 and 67 (with reference to adjudication of 24.11.2011 – C-404/09, margin number 156).

³² ECJ, adjudication of 14.1.2016 – C-399/14, margin number 56 *et seq.*; adjudication of 10.11.2016 – C-504/14, margin number 41.

³³ settled ECJ case law, adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 11.4.2014 – C-258/11, margin number 35; adjudication of 16.2.2012 – C-182/10, margin number 74 *et seq.*

³⁴ ECJ, adjudication of 18.10.1989 – C-374/87, margin number 50–56. Following BVerwG, adjudication of 18.7.2013 – 4 CN 3.12, margin number 28 *et seq.*

³⁵ ECJ, adjudication of 18.12.2007 – C-186/06, margin number 37; adjudication of 11.7.1996 – C-44/95, margin numbers 26 *et seq.*, 42; adjudication of 2.8.1993 – C-355/90, margin numbers 18 *et seq.*, 45; adjudication of 28.2.1991 – C-57/89, margin number 22 *et seq.*

³⁶ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 54, 58–62, 67 *et seq.* and headnote 2–3.

³⁷ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 67 *et seq.* and headnote 3.

³⁸ *cf.* ECJ, adjudication of 14.1.2010 C-226/08, margin number 46; adjudication of 10.11.2016 – C-504/14, margin number 41; ECJ case law, adjudication of 14.1.2016 – C-399/14, margin numbers 68–71.

the protection of trust in this law do not exclude the application of new regulations on future impacts.³⁹

Last but not least, if national law already requires a renewed authorisation assessment for an existing project or plan because, for example, significant changes are to be made or the earlier approval was issued for a limited period, then Article 6(3) and (4) HD are applicable as the renewed decision for authorisation is now carried out based on listing of the site.⁴⁰ This also applies to replacement constructions and for recurrent measures.⁴¹

4. Projects and plans directly connected with or necessary to the management of the site

In its form as a derogating provision, the scope for proposed management developments is to be narrowly defined and is only applicable if developments are intended to promote the relevant conservation objectives in the site within the meaning of Article 6(1) HD.⁴² The reason for the derogation is that significant adverse impacts can normally be excluded in these cases. The measure must be implemented or commissioned by the body managing the site. In contrast, other measures that pursue different aims within the site (e.g. walking or cycling routes to promote tourism or for agriculture, forestry and fishery) are not covered by this exemption as significant adverse impacts on the conservation objectives cannot generally be ruled out.⁴³ The ECJ says, “it is not sufficient merely to describe such a project as a Natura-2000 measure or to make a contract with the area management.”⁴⁴ However, pursuant to the European Commission, an appropriate assessment is dispensable if such measures have been organised with a view to their compatibility within the scope of an integrated management plan.

5. Plans

The ECJ has still not defined the term “plans” in Article 6(3) HD. The Court has certainly not disapproved the opinion of the Advocate General *Fennelly* in the case C-256/98, that the term “plan” must be interpreted extensively.⁴⁵ The Court has not yet clarified whether recourse can and should be taken to the definition of the term in

³⁹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68 *et seq.*

⁴⁰ *cf.* ECJ, adjudication of 14.1.2016 – C-399/14, margin number 76; adjudication of 14.1.2010 C-226/08, margin number 41–46; adjudication of 7.9.2004 – C-127/02, margin number 28 *et seq.*

⁴¹ *Möckel Nature Conservation* 2017b.

⁴² ECJ, adjudication of 4.3.2010 – C-241/08, margin number 50–56.

⁴³ *Epiney*, in: *Epiney/Gammenthaler* 2009, p. 93 *et seq.*

⁴⁴ Case C-241/08 *Commission v France* [2010] ecr I-1697, paras. 44–56.

⁴⁵ ECJ, adjudication of 6.4.2000 – C-256/98, margin number 38; AG *Fennelly*, opinion delivered on 16.9.1999 – C-256/98, ECLI:EU:C:1999:427, paragraph 33.

the European Directive 2001/42/EEC on the Strategic Environmental Assessment⁴⁶ (SEA Directive). Even the terminological differentiation between project and plan is still not clearly visible in ECJ case law on appropriate assessments as the ECJ itself refers to “plan or project” in its decisions, even if this is only (initially) the case of a plan.⁴⁷ What appears to be crucial to the ECJ is the proposed development that is being pursued with a plan, which is why it uses both terms together. In effect, a plan can only have a significant adverse effect on a Natura 2000 site if the proposed developments in the plan could have significant impacts on the conservation objectives.

Controversial discussions are taking place on whether the definition of “plans” in Article 2 a) of the SEA Directive can and should be employed.⁴⁸ The SEA Directive covers plans that are devised or accepted by national, regional or local authorities (including statutory master plans) and must be compiled due to statutory or administrative provisions. The ECJ has clarified for this process that the stipulation “which are required by legislative, regulatory or administrative provisions” does not need to be subject to such a strict interpretation that an absolute statutory obligation exists on the issuing of a plan or programme, as the objectives and practical efficacy of the SEA Directive would otherwise be palpably restricted.⁴⁹

*It follows that plans and programmes whose adoption is regulated by national legislative or regulatory provisions, which determine the competent authorities for adopting them and the procedure for preparing them, must be regarded as ‘required’ within the meaning, and for the application, of Directive 2001/42 and, accordingly, be subject to an assessment of their environmental effects in the circumstances which it lays down.*⁵⁰

A condition for the adoption of a plan that is subject to an assessment is thus simply that legislative or administrative provisions provide for such plans and cover them in more detail. In order to differentiate between “plans and programmes” under the SEA-Directive and “projects”, which are governed by the European Directive 2011/92/EU on the Environmental Impact Assessment⁵¹ (EIA Directive), the ECJ has elaborated that a plan or programme constitute a measure, which defines criteria and

⁴⁶ Directive on the assessment of the effects of certain plans and programmes on the environment, adopted by the European Parliament and Council on 27.6.2001, OJEU no. L 197 of 21.7.2001, p. 30 *et seq.*

⁴⁷ *cf.* e.g. ECJ, adjudication of 21.7.2016 – C-387/15 and C-388/15, margin number 2, 42 *et seq.*; adjudication of 11.9.2012 – C-43/01, margin number 92 *et seq.*, 106 *et seq.*, 118 *et seq.*

⁴⁸ *cf.* Sobotta Journal for Nature Conservation 2017, in press (240); Epiney, in: Epiney/Gammenthaler 2009, p. 97 *et seq.*

⁴⁹ ECJ, adjudication of 22.2.2012 – 567/10, margin number 38–31. *cf.* Sobotta Journal for Nature Conservation 2017, in press (240 *et seq.*).

⁵⁰ ECJ, adjudication of 22.2.2012 – 567/10, margin number 31.

⁵¹ Directive on Environmental Impact Assessment for specific public and private projects adopted by the European Parliament and Council on 13.12.2011, OJEU no. L 26 of 28.1.2012, p. 1 *et seq.* Superseded Directive 85/337/EEC.

detailed rules for the development of land and which subjects implementation of one or more projects to rules and procedures for scrutiny.⁵²

Similar requirements should be also assumed for Article 6(3) HD, as only governmental plans with externally binding or official internal legal effects can predetermine an adverse impact on a Natura 2000 site by a proposed development in a legally relevant manner.⁵³ Whether or not the plan is spatially located inside or outside a Natura 2000 site does not matter, as is the case for projects.⁵⁴ The ECJ has made clear that plans and projects devised by legislative bodies are also subject to the obligations given in Article 6(3) HD.⁵⁵ The whole plan, not only parts thereof, is subject to the appropriate assessment and must be prohibited in the case of incompatibility.⁵⁶

Conversely, private plans are irrelevant, so long as they do not lead to an application for authorisation of a specific proposed development or are to be realised in proposed developments that are not subject to approval. In both cases, however, a project is then present within the meaning of Article 6(3) HD.

6. Projects

6.1. Terminological definition

Even though the Habitats Directive does not specify the term “project” any more closely, a European definition for the term is to be assumed. The ECJ refers to the term “project” in Article 1(2) a) of the EIA Directive for its interpretation of the term and takes a broad view on what projects are. In accordance with Article 1(2) a) of the EIA Directive for the ECJ, the term “project” in Article 6(3) HD includes not only building installations, but also all human interventions in nature and the landscape, independent of whether they are also subject to an authorisation procedure based on national law.⁵⁷ It is therefore not the kind of proposed development that is decisive, but simply the potential effects on Natura 2000 sites, which is why an appropriate assessment is also necessary for activities that are not intrinsically associated with physical

⁵² cf. ECJ, adjudication of 11.9.2012 – C-43/10, margin number 95; adjudication of 22.2.2012 – 567/10, margin number 30.

⁵³ A broader interpretation uses Environment, Heritage and Local Government of Ireland 2009, p. 19.

⁵⁴ cf. *Therivel* Environmental Impact Assessment Review 2009, 261 (Fig. 1 at p. 262).

⁵⁵ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 69.

⁵⁶ the debate on this question in the UK in *Therivel* Environmental Impact Assessment Review 2009, 261 (264).

⁵⁷ settled ECJ case law, adjudication of 14.1.2010 – C-226/08, margin number 38; adjudication of 7.9.2004 – C-127/02 – Waddenvereniging and Vogelbeschermingsvereniging, margin number 24 *et seq.*; adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.*

change.⁵⁸ This means that every human measure could be a project, if it might have negative potential effects on the integrity of a Natura 2000 site. Furthermore, it is irrelevant whether the project proponent is a private person or public authority, including the legislator. The ECJ also states in settled case law that an appropriate assessment is to be carried out if there is the likelihood or threat that a project, either alone or in combination with other projects and plans, will have a significant adverse impact on the integrity of the site concerned.⁵⁹ No appropriate assessment is required if this can clearly be ruled out, i.e. without reasonable doubt, by a screening process.⁶⁰ The screening of a potential threat is to be based on objective circumstances and under consideration of the specific characteristics and environmental conditions of the Natura 2000 site in question. It is only in this appraisal of the potential significant adverse effects that the type, size and location of a project must be considered. However, if the project definition of the ECJ – referring to the term “project” in the EIA Directive – depends on the potential negative effects, then the term “project” includes the screening of the potential impacts.⁶¹ There is only a project in the sense of Articles 6(3) HD, requiring an appropriate assessment, if significant effects could not be ruled out in the screening process. The screening is therefore not an expendable process step,⁶² not mentioned in Article 6(3) HD,⁶³ but is part of the project definition.

A variety of consequences and further questions arise from the impact-related understanding of the term “project”.⁶⁴

6.1.1. Proposed developments within and outside Natura 2000 sites

The protective system stipulated in Article 6(3) HD is basically limited to the protected site within its designated boundaries. Proposed developments outside a Natura 2000 site may, however, have external effects on the conservation objectives of the site – for example, because they emit compounds (e.g. nutrients) or other emissions,

⁵⁸ cf. ECJ, adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.*; European Commission 2000, p. 32; BVerwG case law, adjudication of 12.11.2014 – 4 C 34.13, margin number 29; adjudication of 19.12.2013 – 4 C 14.12, margin number 28.

⁵⁹ ECJ, adjudication of 7.9.2004 – C-127/02, margin number 43 *et seq.*; adjudication of 26.5.2011 – C-538/09, margin number 39; adjudication of 21.7.2011 – C-2/10, margin number 41 *et seq.* cf. *Ureta JEEPL* 2007, 84 (87 *et seq.*).

⁶⁰ cf. ECJ, adjudication of 7.9.2004 – C-127/02, margin number 44, 49; adjudication of 26.5.2011 – C-538/09, margin number 39; European Commission 2001, p. 16.

⁶¹ more detailed on the screening step, *Möckel Nature Conservation* 2017b; European Commission 2001, p. 16 *et seq.* and *Peterson/Kose/Uustal Journal of Environmental Assessment Policy and Management* 2010, 185 (190 *et seq.*).

⁶² however, *Lees JEL* 2016, 191 (203 *et seq.*).

⁶³ established by European Commission 2001, p. 16 *et seq.*

⁶⁴ for the Court decisions and debate in the UK, *Tromans* 2012, chap. 5.

including noise (e.g. traffic or aircraft noise), into the site.⁶⁵ A proposed development may also exert an external influence on the water balance within the site, for example, through the diversion of rivers, a reduction in their water levels, or changes in the groundwater levels in the site due to drainage measures.⁶⁶ Such proposed developments are, at minimum, to be subjected to a screening process and to be fully assessed for their compatibility if a significant adverse impact cannot be excluded.⁶⁷ Finally, an appropriate assessment may also be necessary if a proposed development would affect the reproduction or reduce the number of individuals of those species in the relevant protected areas (e.g. in the case of migratory species) or prevent gene flow between the protected animals inhabiting the site and relevant neighbouring populations outside it or prevent access to important food sources, areas where reproduction takes place or resting sites.⁶⁸ Projects are therefore not restricted to proposed developments within Natura 2000 sites.

General specifications for relevant projects based on the size of the radius around the Natura 2000 site are not expedient, because the significant of impacts of projects are rather more dependent on the habitat types and species that are protected, the kind of project and impact, on the attribution of effects over distance and on the impacts of cumulating projects and plans.⁶⁹

6.1.2. Imputation of indirect impacts

The broad scope of an impact-related project term raises the question of when an appropriate assessment for a proposed development is necessary due to indirect impacts. In this process, indirect impacts are to be understood as impacts that are directly and causally linked to the proposed development, but are only associated with the development through additional causal links in a chain. Relevant indirect or collateral effects are present, for example, if non-protected animal and plant species that are a basic food source of a protected species in the site (e.g. insects for birds) are adversely affected by a proposed development or if a river is polluted by the proposed development and

⁶⁵ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; adjudication of 20.10.2005 – C-6/04, margin number 34; BVerwG, adjudication of 18.12.2014 – 4 C 35.13, margin number 34, 43 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 84, 88 *et seq.*

⁶⁶ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*

⁶⁷ *cf.* ECJ, adjudication of 20.10.2005 – C-6/04, margin number 34; adjudication of 7.9.2004 – C-127/02, margin number 43 *et seq.*; European Commission 2000, p. 33.

⁶⁸ ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 29 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 32–34; decision of 23.1.2015 – 7 VR 6.14, margin number 16; adjudication of 14.7.2011 – 9 A 12.10, margin number 93.

⁶⁹ *cf.* Therivel Environmental Impact Assessment Review 2009, 261 (264); Möckel Nature Conservation 2017b.

the pollutants thus enter into a Natura 2000 site. Such indirect or collateral effects of a proposed development are also relevant to the assessment, insofar as they can be imputed.⁷⁰ No evidence for causality is required in the appropriate assessment and the probability of significant adverse effects due to the proposed development is therefore sufficient.⁷¹

However, an obligation to undergo an assessment, thus a project in the sense of Article 6(3) HD, can no longer be assumed if the expected effects of a proposed development cannot be unambiguously attributed to the development. For example, this is the case for the emission of greenhouse gases, as no concrete association can be made between the proposed development and the effects of climate change on a specific site due to global processes and emissions. The same principally applies if the imputation is affected by the autonomous, independent actions of third parties (e.g. the construction of a biogas plant also results in an increase in maize crops within a Natura 2000 site). Conversely, when cumulative actions and impacts of third parties arise from the proposed development – as is frequently the case for plans – then this increase could be attributed to the development (e.g. when opening or expanding roads or building or expanding housing results in greater visitor traffic and increased negative effects on a Natura 2000 site⁷²).

6.1.3. Planned impacts on Natura 2000 sites?

The BVerwG has raised the question on whether the impact-related term “project” requires greater specification and narrowing down in relation to the general prohibitions to change and disturbance in Article 6(2) HD, stating that a premise for projects within the meaning of Article 6(3) HD is that they must be planned developments.⁷³ The Court therefore only regards human activities that are not related to the construction or operation of a plant as a “project” (e.g. low-altitude flying by military aircraft, airways or non-binding landscape plans) if there is the option of assessing them for their compatibility with the conservation objectives of a Natura 2000 site, through existing drafts, concepts or a stipulated practice.⁷⁴ The consequence of this would be that measures that had to be carried out ad hoc, like agricultural measures (e.g. pesticide use, conversion of permanent grassland) would not constitute projects in the sense of

⁷⁰ cf. e.g. BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 11.

⁷¹ cf. ECJ, adjudication of 10.11.2016 – C-504/14, margin number 29; adjudication of 14.1.2016 – C-399/14, margin number 42; adjudication of 14.1.2016 – C-141/14, margin number 58; adjudication of 24.11.2011 – C-404/09, margin number 142.

⁷² cf. ECJ, adjudication of 10.11.2016 – C-504/14, margin number 53-60; *Therivel* Environmental Impact Assessment Review 2009, 261 (265 *et seq.*).

⁷³ BVerwG, adjudication of 13.4.2013 – 4 C 3.12, margin number 30.

⁷⁴ BVerwG, adjudication of 8.1.2014 – 9 A 4.13, headnote 6 and margin number 55. Confirmatory BVerwG, decision of 24.3.2015 – 4 BN 32.13, margin number 35.

Article 6(3) HD, which require an assessment of their compatibility. The Court hereby includes considerations on feasibility in the definition of the term “project”.

To what extent this is compatible with Article 6(3) HD appears debatable, as activities that have not been planned comprehensively or are being constantly practised can also constitute interventions with significant adverse effects on Natura 2000 sites. Furthermore, the ECJ has specified strict requirements, also related to the protected goods, of a blanket release from the appropriate assessment for specific proposed developments (see 6.2). After all, a planned approach underlies every activity, which is why a more precise differentiation would be required here based on the quality of forward planning. The question on the option of an official appropriate assessment referred to by the Court is therefore of greater importance, as European Law is also not permitted to demand anything impossible or disproportionate of Member States in accordance with Article 5(4) of the Treaty on European Union (TEU). However, this does not result in a licence for exemption for specific activities. On the contrary, Member States are under the obligation to ensure that all relevant activities can be appropriately assessed by the authorities using suitable procedural provisions. For example, this can be implemented through an obligation to disclose specific activities prior to their conduct (see 6.1.4).

Actions that are exempt from the obligation for assessment are exclusively those that only have the properties of bagatelles and where significant adverse effects on the conservation objectives can be excluded (e.g. leisure activities like walking, cycling or riding on designated). This is because, in this case, only the accumulation of multiple individual actions (many visitors) could have significant adverse effects. Significant negative cumulative effects must be prevented by the authorities through measures pursuant to Article 6(1) and (2) HD (e.g. guiding or limiting visitors) and must also be considered within the scope of the appropriate assessment on the creation of infrastructures (e.g. paths in the site, roads to the site).

6.1.4. No restriction to proposed developments with an obligation for disclosure or authorisation

If the impact on Natura 2000 sites is decisive, then the requirement for an appropriate assessment does not depend on national rules of procedure, especially on an obligation for approval or disclosure.⁷⁵ The ECJ therefore consequently saw a contravention against Article 6(3) HD in the former German legal definition of the term “project”, which had limited the term to proposed developments subject to authorisation.⁷⁶ It is also irrelevant whether a proposed development is planned by a national office, a com-

⁷⁵ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68 *et seq.*; adjudication of 10.1.2006 – C-98/03, margin number 40 *et seq.*

⁷⁶ ECJ, adjudication of 10.1.2006 – C-98/03, margin number 42 *et seq.*

pany or a citizen. Even projects and plans put forward by the legislator are not exempt from the protective system and are also to be assessed.⁷⁷

Nevertheless, a specific obligation for disclosure or approval that is related to Natura 2000 is required for projects that do not otherwise require approval or disclosure, to ensure that the responsible authorities can assess the compatibility of all relevant projects. For this reason, after the judgement reached by the ECJ, a general obligation for disclosure was introduced in § 34(6) of the German Federal Nature Conservation Act (BNatSchG) for all projects that are otherwise not subject to an obligation for approval or disclosure. The German legislator did not, albeit, define in any greater detail when a human activity constitutes a project.

However, a general obligation for disclosure for “projects” without any further detail on the definition of the term “project” raises significant practical and essentially also legal problems, as the European understanding of the term “project” is then being referred to, based on which all projects are interventions that are likely to have a significant effect on the integrity of the site concerned (see 6.2). This means it is incumbent upon the citizen or company acting in the case concerned to assess whether their planned measure, either alone or in combination with other projects and plans, is likely to have significant adverse effects on the conservation objectives - i.e., these cannot be unambiguously excluded. This screening process that must be conducted *ex officio* is – as explained above – to be undertaken based on objective circumstances and under consideration of the specific characteristics and environmental conditions of the Natura 2000 site in question. There are significant doubts as to whether every private proponent of a measure (e.g. farmers or foresters, maintenance associations, private building contractors) are in the position, sufficiently competent and also willing to independently carry out such a specialist conservation screening process adequately and objectively or to commission it at their own cost.⁷⁸ The cumulative impacts of other projects and plans alone are difficult to determine and assess for private proponents of a measure, as they will usually have no legal or administrative access to the required information on the other proposed developments.

This means that, in the event of a general obligation for disclosure for “projects”, there is no legal guarantee that all relevant proposed developments will be directed to undergo an official appropriate assessment. The comprehensible interest of the State in limiting the amount of official assessment work,⁷⁹ however, does not justify a lower conservation standard for projects that are not subject to an obligation for approval or disclosure. Therefore, all measures and proposed developments within or in the vicinity of Natura 2000 sites, for which adverse effects on the conservation objectives cannot be excluded based on general experience, are to be subject to a blanket obligation for disclosure. The measures and proposed developments, as well as the relevant spatial scope of validity for the obligation for disclosure should

⁷⁷ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 69.

⁷⁸ cf. *Sundseth/Roth* 2013, p. 52 *et seq.*, 92.

⁷⁹ in line with the German Federal Governance (Bundestag-Drucksachen 16/5100, p. 10).

be specified in a legally binding manner in a list that is specific to the site or in a general list. In the event that a reduction in administrative work is desired, a general obligation for authorisation could be considered for land use practices (e.g. agriculture, forestry, fishery, and hunting) that have not been subject to approval to date, instead of making every single land use measure subject to disclosure and assessing it in cases of disclosure. This condition for approval should, whenever possible, be associated with a concentrated effect in relation to all obligations under public law and should only apply for a limited time period to ensure that land use is again assessed at regular intervals based on current practices, the legal position and the situation in the site concerned.

6.1.5. Classification of recurrent measures

In spite of longer time frames, there is only one project in the case of uninterrupted operation of facilities (e.g. a motorway). For measures that are not constant, but only recurrent at regular intervals (e.g. maintenance measures⁸⁰; land use measures by agriculture, forestry or fisheries⁸¹), the question arises as to whether this is one contiguous project or several successive individual projects or if a Member State is permitted to stipulate procedural rules on this.⁸² According to the ECJ, the conservation purpose of the Habitats Directive demands, on principle, that every intervention is assessed separately, especially when each measure already requires approval pursuant to national law.⁸³ This apparently applies even when a recurrent measure has finally been approved pursuant to national law before expiry of the deadline for implementation, as the requirement for a renewed appropriate assessment is not contravened by the principles of legal certainty and the protection of legitimate expectations.⁸⁴ However, the ECJ does recognise that recurrent maintenance measures can be regarded as a single project within the meaning of Article 6(3) HD if they can be viewed as a uniform measure based on their type or the circumstances of their implementation, especially as they always pursue the same aim (e.g. guaranteeing a specific depth of the shipping channel).⁸⁵ At the core of this lies a weighing up process between the protection of Natura 2000 sites from new interventions that is as comprehensive as possible and considerations on feasibility and legal protection, whereby, even in the case of a uniform project, Natura 2000 sites are constantly under the protection of the general prohibition of deterioration and disturbance in line with Article 6(2) HD.

⁸⁰ ECJ, adjudication of 14.1.2010 – C-226/08, margin number 35 *et sqq.*

⁸¹ ECJ, adjudication of 7.9.2004 – C-127/02 – Waddenvereniging and Vogelbeschermingsvereniging, margin number 21 *et sqq.*

⁸² *cf. Schoukens* JEEPL 2014, 1 *et sqq.*

⁸³ ECJ, adjudication of 14.1.2010 – C-226/08 – Stadt Papenburg, margin number 37–41; adjudication of 7.9.2004 – C-127/02, margin number 28.

⁸⁴ ECJ, adjudication of 14.1.2010 – C-226/08, margin number 41 *et sqq.*

⁸⁵ ECJ, adjudication of 14.1.2010 – C-226/08, margin number 47–51.

Due to the impact-related understanding of the term, based on the dynamic development of the habitat types, species and habitat areas in the site concerned, new interventions must essentially be evaluated based on the situation in the site at the time of the planned measures, even if the type and extent of the interventions are similar.⁸⁶ In this process, the conservation status of the habitat types and species and their developmental trends can only be appropriately assessed at regular intervals over a few years due to the diversity of possible ecological changes (especially based on species dynamics and climate change) and the cumulative effects of additional proposed developments and impacts.⁸⁷ This means there is usually a change in the environmental situation after a year or more. This, alone, argues against the acceptance of an unlimited uniform project, even if the measures remain the same in type and scope.⁸⁸ Therefore, at minimum, recurrent measures need a screening process in order to check the status of the affected habitat types and species, to apply new scientific knowledge and to check on the environmental situation in the site as a whole, including cumulating projects and plans.

Rather more, the latitude granted by the ECJ in relation to consideration must be interpreted such that, procedurally, recurrent similar measures can only be summarised into one project within a limited time frame (e.g. 3–5 years) without notable losses in protection. In this process, the time frame is to be primarily determined based on the current conservation status of the affected habitat types and species and their assumed development and dynamics within the site. An approval of recurrent measures thus always requires time limitation.⁸⁹ If the type and scope of the measures change, then this constitutes a new project that must be assessed.⁹⁰ In contrast, if the recurrent measures are not subject to approval and also not part of a different approval (e.g. decision on planning approval for waterway construction), then each measure constitutes a project that must be assessed given the absence of the procedural structure inherent in an approval and the fact that no time limit can be imposed. This applies to many recurrent measures, in particular, most measures in agriculture, forestry and fisheries. At minimum, an obligation for disclosure to the responsible authorities is then required for these measures, whereby the introduction of a more comprehensive operating licence is probably associated with less administrative work for authorities and enterprises (see 6.1.4).

⁸⁶ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 58–62; adjudication of 7.9.2004 – C-127/02, margin number 21 *et seq.*; BVerwG, decision of 12.3.2008 – 9 A 3.06, margin number 89.

⁸⁷ cf. European Commission 2015; European Commission 2013; *Araujo et al.* Ecology Letters 2011, 484 *et seq.*; *Uchida/Ushimaru* Biodiversity declines due to abandonment and intensification of agricultural lands: patterns and mechanisms 2014; *Wesche et al.* Biological Conservation 2012, 76 *et seq.* For legal consequences for Natura 2000 and the appropriate assessment, *Möckel/Köck* JEEPL 2013, 54 *et seq.*; *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 (917).

⁸⁸ cf. *Schoukens* JEEPL 2014, 1 (8 *et seq.*, 24 *et seq.*); *Albrecht/Gies* NuR 2014, 235 (241 *et seq.*). Other opinion *Württemberg* NuR 2010, 316 (318); *Frenz* NVwZ 2011, 275 (277).

⁸⁹ in contrast, the following only regard a time limit as potentially necessary: *Frenz* NVwZ 2011, 275 (277); *Albrecht/Gies* NuR 2014, 235 (242).

⁹⁰ *Albrecht/Gies* NuR 2014, 235 (241).

6.2. Anticipated statutory exemptions for specific types of intervention

The ECJ has taken clear action against any attempts by Member States⁹¹ to extend the scope of the term “project” and to thereby limit the applicability of the appropriate assessment through a statutory exemption for specific interventions and types of proposed development:

*It is therefore clear from the case-law of the Court that, in principle, pursuant to Article 6(3) of the Habitats Directive, a Member State may not, on the basis of the sphere of activity concerned or by introducing a declaratory scheme, systematically and generally exempt certain categories of plans or projects from the obligation requiring an assessment to be undertaken of their implications for Natura 2000 sites.*⁹²

An exemption is only permissible in exceptional cases where the criteria for exemption can guarantee that the possibility of a significant adverse impact on the protected areas due to the projects concerned is ruled out.⁹³ The conditions that justify exemption must guarantee, both systematically and in each individual case, that the activities in question will cause no disturbance that might have a significant adverse impact on the conservation objectives.⁹⁴ In each individual case, therefore, there must also be certainty – i.e. without remaining scientific doubts – that no significant adverse effects are to be expected due to exemptions. A simple reference to the obligation to adhere to general conservation provisions is not sufficient if this will only reduce the threat of significant adverse impacts, but does not exclude them.⁹⁵ Likewise, spheres of action or installations cannot be sweepingly excluded, for example, due to their small scope or the low cost of proposed developments.⁹⁶ This also applies when these have previously already shaped the site, as is the case for agriculture, forestry and fishery or hunting,⁹⁷ or adherence to the conservation objectives has been contractually agreed.⁹⁸ The reason for this is that whether or not an activity or proposed development will have significant adverse effects is not only dependent on their nature and extent, but also on the sensitivity and the condition of the habitat types and species that are under protection in

⁹¹ e.g. § 10(1) number 11 BNatSchG 2002.

⁹² ECJ, adjudication of 26.5.2011 – C-538/09, margin number 45.

⁹³ ECJ, adjudication of 10.1.2006 – C-98/03, margin number 41; adjudication of 26.5.2011 – C-538/09, margin number 41 *et seq.* *cf.* Ureta JEEPL 2007, 84 (90).

⁹⁴ *cf.* ECJ, adjudication of 4.3.2010 – C-241/08, margin number 36.

⁹⁵ ECJ, adjudication of 26.5.2011 – C-538/09, margin number 63. *cf.* adjudication of 4.3.2010 – C-241/08, margin number 39.

⁹⁶ *cf.* ECJ, adjudication of 26.5.2011 – C-538/09, margin number 55 *et seq.*; adjudication of 21.9.1999 – C-392/96 margin number 66; adjudication of 10.1.2006 – C-98/03, margin number 43 *et seq.*, and adjudication of 4.3.2010 – C-241/08 margin number 31.

⁹⁷ ECJ, adjudication of 4.3.2010 – C-241/08, margin number 39, 56.

⁹⁸ ECJ, adjudication of 4.3.2010 – C-241/08, margin number 55.

the site in question, as well as on the previous pressures on the site and the additional cumulative effects of other projects and plans.⁹⁹

Projects with a small scope or quantity can also have significant adverse effects on the environment if they are realised in locations where the environmental factors like fauna and flora, soil, water, climate or cultural heritage react sensitively to the tiniest of changes or other impacts exist or are to be expected.¹⁰⁰ Exemptions made in relation to the Natura 2000 appropriate assessment for projects and plans put forward by the administration, such as roads, railways, development plans or relating to the army¹⁰¹, even projects proposed by the legislator¹⁰², are also prohibited as there are no suitable institutional guarantees for sufficient protection. For this reason, plans and projects for site management that are issued with exemption in Article 6(3) HD must also be subject to strict requirements (see 4).

As a result, anticipated statutory exemptions must refer to the sensitivity and the condition of the affected habitat types and species to exclude significant effects with certainty in every case. General exemptions would therefore, at best, comply with these requirements within the designation act of a Natura 2000 site. Even here, compliance with the relevant provision in the designation act should be ensured through an anticipated Habitats Directive appropriate assessment.

Finally, the blanket exemption for certain activities also raises problems in relation to the principle of equality as other activities without exemption are subject to the conservation regime and must accept that the impacts of exempt activities will count against them as a previous pressure or cumulative pressure (e.g. when the high nitrogen pollution from agriculture poses an obstacle to a road construction project).

6.3. Individual questions relating to specific types of proposed development

6.3.1. Creation of sections for linear infrastructural developments

Longer linear infrastructures, such as motorways, railways and waterways or power lines are frequently divided into multiple sections, for which independent plans are then produced and authorisation procedures carried out. According to the BVerwG, such breaking into sections is also permissible in relation to the assessment of compatibility with Natura 2000 and the entire infrastructural development is thus not to be

⁹⁹ cf. ECJ, adjudication of 26.5.2011 – C-538/09, margin number 55 *et seq.*; adjudication of 21.9.1999 – C-392/96 margin number 66.

¹⁰⁰ ECJ, adjudication of 26.5.2011 – C-538/09, margin number 55 *et seq.*; adjudication of 10.1.2006 – C-98/03, margin number 44; adjudication of 21.9.1999 – C-392/96 margin number 66. cf. *Ureta JEEPL* 2007, 84 (90).

¹⁰¹ BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 16 *et seq.*

¹⁰² ECJ, adjudication of 16.2.2012 – C-182/10, margin number 69.

regarded and assessed as one project.¹⁰³ The ECJ also raises no objections to the creation of sections.¹⁰⁴ However, this does not mean that planning that is limited to one section is permitted to completely ignore and not overcome problems that are raised by subsequent sections.¹⁰⁵ A provisional positive overall verdict is required in relation to the subsequent sections, especially within the scope of a derogation assessment pursuant to Article 6(4) HD, to assess whether imperative reasons of overriding public interest justify a significant adverse impact.¹⁰⁶

The BVerwG elaborates in settled case law on the required forecast projection, as follows:

*The forecast must predict that the realisation of a proposed development will also not be impeded over its further course by any obstacles that cannot be overcome a priori. Whether or not the subsequent sections of the project can be realised is to be answered in court proceedings based on objective circumstances; what is decisive in this process is whether realisation can be excluded after a summary appraisal of the facts of the case. This forecast will not simply have a negative outcome because the proposed development – as is the case here – could or will probably have adverse impacts on an SCI over its further course; rather more, it must also be considered whether it appears possible to guarantee compatibility with the aid of conservation measures or to achieve permissibility of a proposed development based on a derogation assessment.*¹⁰⁷

Conversely, the legal validity of an approved section does not constitute an obligation to implement the subsequent sections in the sense that it is in the public interest to implement those sections and that this interest can no longer be overcome.¹⁰⁸ Although greater weighting is allocated to the planning of connection points (so-called constraint points) by the BVerwG, these do not create any strict connections in the sense that they must be set as fixed determinants in further planning.¹⁰⁹

6.3.2. Air corridors

Based on the impact-related project term, the Federal Administrative Court (BVerwG) in Germany has recognised that the defining of air corridors constitutes a project within the meaning of Article 6(3) HD if this results in flights over protected areas at

¹⁰³ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 151; decision of 28.11.2013 – 9 B 14.13, margin number 13.

¹⁰⁴ cf. ECJ, adjudication of 24.11.2016 – C-461/14, margin number 14, 24, 29.

¹⁰⁵ BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 13.

¹⁰⁶ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 151; decision of 28.11.2013 – 9 B 14.13, margin number 13. For details on this, also Möckel Nature Conservation 2017a.

¹⁰⁷ BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 13. Similar to, e.g. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 151; adjudication of 12.3.2008 – 9 A 3.06, margin number 270 *et seq.*

¹⁰⁸ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 82 with further references.

¹⁰⁹ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 82.

a certain regularity and intensity.¹¹⁰ Even the fact that deviations from the defining of flight procedures are permitted in individual cases under German law changes nothing in relation to this. According to the BVerwG, deviations from the defined air corridors requiring approval (e.g. lower flight altitudes) also constitute projects, even if these are associated with the German armed forces and thus serve the purpose of protecting public safety.¹¹¹

6.3.3. Maintenance measures

Maintenance measures entail managing and maintaining objects, including linear structures like roads, railways, waterways, long distance pipelines, supply and sewage pipelines or drainage ditches, and spatially limited facilities like harbours, airports, residential areas or industrial plants. However, in the European cultural landscape, these are also carried out on natural water bodies and near-natural landscape elements (e.g. hedges, parks). Maintenance measures denote that these are intended to reinstate the earlier status quo at regular intervals or as required and to remove natural or anthropogenic changes that have occurred in the interim (e.g. removal of plant growth in drainage ditches, removal of dead wood from water bodies, keeping road and railway margins and power lines clear). These act on a regular basis to combat natural development. Adverse effects on the conservation objectives can therefore not be excluded if these measures are carried out within or in the vicinity of Natura 2000 sites, such that this constitutes a project and, at minimum, screening should be conducted.¹¹² The question discussed in 6.1.5 arises, as to whether and to what extent maintenance measures that are temporally separated are to be treated as a project, as these are recurrent measures. This must also be answered for maintenance measures in relation to the fact that measures that are subject to approval can generally be summarised into one project within a limited time span, while measures that are not subject to approval are to be assessed individually and accordingly in line with Article 6(3) HD.

Pursuant to Article 6(3) HD, those measures that are immediately associated with the management of a Natura 2000 site or are required for this purpose do not constitute maintenance measures that are obliged to undergo an assessment. This refers to the conservation, management and developmental measures for the maintenance of the relevant protected habitat types and species as these have no impact on the conservation objectives, but are designed to promote them (see 4).

¹¹⁰ BVerwG, adjudication of 19.12.2013 – 4 C 14.12, margin number 28; adjudication of 12.11.2014 – 4 C 34.13, margin number 29.

¹¹¹ BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 30.

¹¹² ECJ, adjudication of 14.1.2010 – C-226/08, margin number 41–50; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*; BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 97 *et seq.*

6.3.4. Land use practices related to agriculture, forestry and fisheries

Agriculture and forestry not only constitute the largest uses of areas within and outside Natura 2000 sites, they are also among the factors that pose the greatest threat to habitats and species in the EU (see 2).¹¹³ The reasons for this are manifold. The main causes are the morphological and hydrological re-organisation of areas, including the transformation of permanent grassland into arable land, the intensity of land use and the application of fertilisers and plant protection products. However, the cessation of land use practices in the case of historically cultivated areas (e.g. meadows with scattered fruit trees, alkaline grassland) also causes losses of habitats and species worthy of conservation. Agriculture, in particular, has a substantial influence on Natura 2000 sites, namely, also from outside their boundaries.¹¹⁴ It is questionable to what extent land use practices related to agriculture, forestry and fisheries meet the definition of the term “project” and are subject to appropriate assessments. The German Federal legislator had attempted up to 2007 to expressly exclude such land use from appropriate assessments. This was regarded as in contravention of Article 6(3) HD in ECJ infringement proceedings.¹¹⁵ Following this, an obligation for disclosure was introduced for all projects that had previously not required approval, whereby the assumption is established in the justification for the change in law that, as a rule, correct land use practices related to agriculture, forestry and fisheries do not constitute a project.¹¹⁶ Under reference to this justification, the BVerwG concluded in a decision that, as a rule, agricultural land use is not to be regarded as a project as correct agricultural land use does not constitute an intervention into nature and the landscape under other national legislation pursuant to § 14(2) of the Federal Nature Conservation Act (BNatSchG), if the requirement for best practice is adhered to and the conservation objectives are considered.¹¹⁷ In the Court’s opinion, the protection of Natura 2000 sites from agricultural impacts is governed solely by Article 6(2) HD. According to this, it is the obligation of the legislator responsible for the protection of a Natura 2000 site to lay down rules through the designation of a protected area and its management to prevent any changes or disturbances arising from a specific agricultural land use that could lead to a significant adverse effect on the site in relation to its components that are essential to the conservation objectives or conservation purpose.¹¹⁸

This decision is surprising as, on the one hand, in the particular case in question - which is by no means an isolated legal case - the implementation of another project (a section of the A33 motorway) was being debated as the critical load in the site

¹¹³ EEA 2015, p. 6 *et seq.*, 151 *et seq.*

¹¹⁴ European Commission 2015, p. 12 *et seq.*; EEA 2015, p. 6 *et seq.*, 151 *et seq.*

¹¹⁵ ECJ, adjudication of 10.1.2006 – C-98/03, margin number 39–45.

¹¹⁶ Bundestag-Drucksache 16/6780, p. 13; Bundestag-Drucksache 16/12274, p. 65.

¹¹⁷ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 89.

¹¹⁸ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 89.

had already been exceeded by agricultural nitrogen pollution from outside the site.¹¹⁹ Construction of the section of the motorway was only admissible within the scope of a derogation procedure through measures to reduce the agricultural nitrogen pollution (including the transformation of arable land into a forested area), which the BVerwG classified as compensatory measures for the overall coherence of Natura 2000 within the meaning of Article 6(4) HD.¹²⁰

On the other hand, the Court's interpretation is not compatible with the impact-related understanding of the term and ECJ case law. Given the significant impacts of measures employed in land use practices related to agriculture, forestry and fisheries on the environment and nature (especially through nitrogen pollution, the use of pesticides and changes to soil structure and the water balance), significant adverse effects on the conservation objectives of Natura 2000 sites - either individually or cumulatively - cannot generally be excluded if these occur within or in the vicinity of Natura 2000 sites. The ECJ¹²¹, but also, for example, the overwhelming opinion in the German literature¹²², therefore classifies measures associated with land use practices related to agriculture, forestry and fisheries as projects within the meaning of Article 6(3) HD, for which at least a screening process is required. This also applies to the resumption of land use practices that were stopped or have been intensified.

The blanket special treatment of land use practices related to agriculture, forestry and fisheries that is favoured by the BVerwG essentially constitutes an anticipated legal exemption for specific types of projects for which the ECJ has set up strict requirements to prevent the circumvention of the protective system outlined in Article 6 HD (see 6.2). Based on this, even uses such as agriculture, forestry and fishery or hunting that shape the site may not be issued with a blanket exemption from the protective system and the appropriate assessment, so long as the possibility of a significant adverse effect on the protected areas by these debatable projects cannot be systematically excluded with certainty in each individual case, as well as without any remaining scientific doubt.¹²³

¹¹⁹ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 62 *et seq.*

¹²⁰ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 84 *et seq.*

¹²¹ on land-use measures that shape sites, such as hunting: ECJ, adjudication of 4.3.2010 – C-241/08, margin number 39, 56; on mechanical shell fishing: ECJ, adjudication of 7.9.2004 – C-127/02, margin number 27; on the intensification of land use, drainage and the consolidation of agricultural land ECJ, adjudication of 25.11.1999 – C-96/98, margin number 29, 45 *et seq.*; on irrigation ECJ, adjudication of 18.12.2007 – C-186/06, margin number 26 *et seq.* and on overgrazing ECJ, adjudication of 13.6.2002 – C-117/00, margin number 22-33.

¹²² e.g. *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 7; *Ewer*, in: Lütke/Ewer, § 34 margin number 4; *Mühlbauer*, in: Lorz et al., Naturschutzrecht, 2013, § 34 BNatSchG margin number 3; *Wolff*, in: Schlacke, GK-BNatSchG, 2012, 1. ed., § 34 margin number 3; *Klinck* 2012, p. 107; *Möckel* NuR 2012, 225 *et seq.*; *Meßerschmidt* 2011, p. 679; *Czybulka* EurUP 2008, 20 (21 *et seq.*).

¹²³ ECJ, adjudication of 4.3.2010 – C-241/08, margin number 39, 55 *et seq.*

However, general nationwide provisions on correct land use practices related to agriculture, forestry and fisheries cannot safeguard this as they are neither tailored towards the protection of species or habitat types in particular need of protection, nor do they contain specific demands for protection for the Natura 2000 sites that are affected.¹²⁴ The demand by the ECJ¹²⁵ for appropriate assessments in individual cases also applies for agriculture, forestry and fisheries. Anticipated general exemption for these land uses is only possible in the designation act, with corresponding site-specific definitions of requirements for land use practices and measures laid down in the management plan.¹²⁶ However, for reasons of proportionality, it is viewed as permissible that multiple land use measures that are based on each other or are recurrent within an adequate time frame of approx. 3–5 years can be handled as a cohesive project (see 6.1.5).

7. Conclusions

In summary, it must be noted that the term “plan” and, to an even greater extent, the term “project” in Article 6(3) HD are the decisive keys to the initiation of an appropriate assessment and to its requirement. In this process, the ECJ allocates the decisive importance to the term “project”. Under reference to the term “project” in Article 1(2) a) of the EIA Directive 2011/92/EU, the term in Article 6(3) HD includes not only building installations, but also all human interventions in nature and the landscape, independent of whether they are also subject to an authorisation procedure based on national law. The impact-related understanding of the term “project” means that the screening of the potential impacts is included. Here, direct impacts and also indirect impacts, which might be attributed, are relevant and interactions with other plans and projects must be considered. From this, it follows that activities which are typically not subject to approval, such as land use practices related to agriculture, forestry and fisheries or maintenance measures, may also constitute projects and hence their appropriate assessment may be required, unless significant adverse effects on the integrity of a Natura 2000 site cannot be clearly excluded, either individually or cumulatively. Statutory rules of procedure (e.g. obligations for disclosure) are therefore required to ensure that an official screening process, followed by a main assessment, if necessary, can be carried out for these land use practices and their management measures. Based on the impact-related understanding of the term, the ECJ also places high demands on anticipated general exemptions for specific project types and plans. There is thus no possibility for statutory national exemption (e.g. for agriculture, forestry and fisheries). Anticipated exemptions require a specific provision in, for example, the designation act of a Natura 2000 site or in the management plan.

¹²⁴ due to the current lack of demanding provisions for agriculture land use in EU *cf.* Möckel Land Use Policy 2015, 342 *et seq.*

¹²⁵ ECJ, adjudication of 20.10.2005 – C-6/04, margin number 47.

¹²⁶ *cf.* European Commission 2000, p. 31. How to set site-specific conservation objectives for farmland areas in Natura 2000, described in European Commission 2014, p. 33 *et seq.*

Acknowledgements

The author thanks the reviewers for their very helpful comments and suggestions and Textworks Translations for the translation of the manuscript and the cited sections of decisions of the BVerwG.

References

- Albrecht J, Gies M (2014) Zulässigkeit von Unterhaltungsmaßnahmen an Infrastruktureinrichtungen und Gewässern in Natura 2000-Gebieten im Lichte der Rechtsprechung des EuGH. *Natur und Recht* 36: 235–46.
- Araujo MB, Alagador D, Cabeza M, Nogues-Bravo D, Thuiller W (2011) Climate change threatens European conservation areas. *Ecology Letters* 14: 484–492. <https://doi.org/10.1111/j.1461-0248.2011.01610.x>
- Czybulka D (2008) Ist das Erste Gesetz zur Änderung des Bundesnaturschutzgesetzes europarechtskonform? *Europäisches Umwelt- und Planungsrecht*, 20–27.
- EEA - European Environment Agency (2015) State of nature in the EU: Results from reporting under the nature directives 2007–2012. EEA Technical report Band No 2/2015, 178 pp.
- Epiney A, Gammenthaler N (2009) Das Rechtsregime der Natura-2000-Schutzgebiete: ein Beitrag zur Auslegung des Art. 6 RL 92/43 und seiner Umsetzung in ausgewählten Mitgliedstaaten. *Nomos*, Baden-Baden, 401 pp. <https://doi.org/10.5771/9783845220147>
- European Commission (2000) Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, 73 pp.
- European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 81 pp.
- European Commission (2013) Guidelines on Climate Change and Natura 2000 - Dealing with the impact of climate change on the management of the Natura 2000 Network of areas of high biodiversity value. Technical Report Band 2013–068, 105 pp.
- European Commission (2014) Farming for Natura 2000 - Guidance on how to support Natura 2000 farming systems to achieve conservation objectives, based on Member States good practice experiences, 145 pp.
- European Commission (2015) The State of Nature in the European Union - Report on the status of and trends for habitat types and species covered by the Birds and Habitats Directives for the 2007-2012 period as required under Article 17 of the Habitats Directive and Article 12 of the Birds Directive. COM(2015) 219 final, 19 pp.
- Frenz W (2011) FFH-relevante Projekte im Spiegel aktueller Judikatur. *Neue Zeitschrift für Verwaltungsrecht*: 275–277.
- Environment, Heritage and Local Government of Ireland (2009) Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, 84 pp.
- Klinck S (2012) Agrarumweltrecht im Wandel. Vom Subventionsrecht zum Recht der Umweltdienstleistungen. Michael Kloepper, *Schriften zum Umweltrecht* Band 174. Duncker & Humblot, Berlin, 175 pp. <https://doi.org/10.3790/978-3-428-53982-6>

- Landmann Rv, Rohmer G (2016) Umweltrecht – Umweltrecht: KrW-/AbfG, BBodSchG, BNatSchG, PRTR-Gesetz. loose-leaf. ed., C.H. Beck (Munich), 81 [supplement consignment]
- Lees E (2016) Allocation of Decision-Making Power under the Habitats Directive. *Journal of Environmental Law* 28: 191–219. <https://doi.org/10.1093/jel/eqw002>
- Lorz A, Konrad C, Mühlbauer H, Müller-Walter MH, Stöckel H (2013) Naturschutzrecht – Naturschutzrecht mit Artenschutz und Europarecht/Internationales Recht. 3. ed., C.H. Beck, Munich, 951 pp.
- McGillivray D (2011) Mitigation, Compensation and Conservation: Screening for Appropriate Assessment under The EU Habitats Directive. *Journal for European Environmental & Planning Law* 8: 329–352. <https://doi.org/10.1163/187601011X604230>
- Meßerschmidt K (2011) Europäisches Umweltrecht. Juristische Kurz-Lehrbücher. C.H. Beck, Munich, 1007 pp.
- Milieu, IEEP, ICF (2016) Evaluation Study to support the Fitness Check of the Birds and Habitats Directives, 668 pp.
- Möckel S (2012) Landwirtschaft und naturschutzrechtliche Eingriffsgenehmigung - Anwendungsbereich und Verfassungsmäßigkeit der Regelvermutung sowie Erforderlichkeit pauschaler Kompensationspflichten. *Natur und Recht* 34: 225–232. <https://doi.org/10.1007/s10357-012-2247-7>
- Möckel S (2014) 35 Years of the EU Birds Directive in the Light of the Court Practice of the European Court of Justice and the German Federal Administrative Court. *Journal for European Environmental & Planning Law* 11: 392–418. <https://doi.org/10.1163/18760104-01104005>
- Möckel S (2015) ‘Best available techniques’ as a mandatory basic standard for more sustainable agricultural land use in Europe? *Land Use Policy* 47: 342–351. <https://doi.org/10.1016/j.landusepol.2015.04.021>
- Möckel S (2017a) The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 87–116. <https://doi.org/10.3897/natureconservation.23.13603>
- Möckel S (2017b) The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 1–29. <https://doi.org/10.3897/natureconservation.23.13599>
- Möckel S, Köck W (2013) European and German Nature Conservation Instruments and their Adaptation to Climate Change - A Legal Analysis. *Journal for European Environmental & Planning Law* 10: 54–71. <https://doi.org/10.1163/18760104-01001004>
- Opdam PFM, Broekmeyer MEA, Kistenkas FH (2009) Identifying uncertainties in judging the significance of human impacts on Natura 2000 sites. *Environmental Science & Policy* 12: 912–921. <https://doi.org/10.1016/j.envsci.2009.04.006>
- Pe'er G, Zinngrebe Y, Hauck J, Schindler S, Dittrich A, Zingg S, Tscharnkte T, Oppermann R, Sutcliffe LME, Sirami Cl, Schmidt J, Hoyer C, Schleyer C, Lakner S (2016) Adding

- Some Green to the Greening: Improving the EU's Ecological Focus Areas for Biodiversity and Farmers. *Conservation Letters*: 1–4. <https://doi.org/10.1111/conl.12333>
- Pe'er G, Dicks LV, Visconti P, Arlettaz R, Báldi A, Benton TG, Collins S, Dieterich M, Gregory RD, Hartig F, Henle K, Hobson PR, Kleijn D, Neumann RK, Robijns T, Schmidt J, Shwartz A, Sutherland WJ, Turbé A, Wulf F, Scott AV (2014) EU agricultural reform fails on biodiversity. *Science* 344: 1090–1092. <https://doi.org/10.1126/science.1253425>
- Peterson K, Kose M, Uustal M (2010) Screening decisions concerning the likely impacts of plans and projects on natura 2000 sites. *Journal of Environmental Assessment Policy and Management* 12: 185–214. <https://doi.org/10.1142/S1464333210003553>
- Schlacke S (2012) GK-BNatSchG – Gemeinschaftskommentar zum Bundesnaturschutzgesetz. Carl Heymann, Neuwied, 938 pp.
- Schoukens H (2014) Ongoing activities and natura 2000: Biodiversity protection vs legitimate expectations? *Journal for European Environmental and Planning Law* 11: 1–30. <https://doi.org/10.1163/18760104-01101001>
- Sobotta C (2017) The European Union legal boundaries for semi-natural habitats management in Natura 2000 sites. *Journal for Nature Conservation*: 1–7. <https://doi.org/10.1016/j.jnc.2017.07.003>
- Sundseth K, Roth P (2013) Study on Evaluating and Improving the Article 6.3 Permit Procedure for Natura 2000 Sites. Europäische Kommission, 104 pp. http://ec.europa.eu/environment/nature/natura2000/management/docs/AA_final_analysis.pdf
- Therivel R (2009) Appropriate assessment of plans in England. *Environmental Impact Assessment Review* 29: 261–272. <https://doi.org/10.1016/j.eiar.2009.01.001>
- Tromans S (2012) The Meaning of 'Any Plan or Project' Under Article 6(3). In: Jones G (Ed.) *The Habitats Directive: A Developer's Obstacle Course?* Hart Publishing, Oxford.
- Uchida K, Ushimaru A (2014) Biodiversity declines due to abandonment and intensification of agricultural lands: patterns and mechanisms. *Ecological Monographs* 84: 637–658. <https://doi.org/10.1890/13-2170.1>
- Underwood E, Tucker G (2016) Ecological Focus Area choices and their potential impacts on biodiversity - Report for BirdLife Europe and the European Environmental Bureau. 10.13140/RG.2.2.12692.30085. Institute for European Environmental Policy (IEEP), 103 pp. http://www.ieep.eu/assets/2156/IEEP2016_EFA_impacts_biodiversity.pdf
- Ureta AG (2007) Habitats Directive and Environmental Assessment of Plans and Projects. *Journal for European Environmental & Planning Law* 2: 84–94. <https://doi.org/10.1163/187601007X00091>
- Vasiliki K, Hovardas T, Dieterich M, Ibisch PL, Mihok B, Selva N (2015) The challenge of implementing the European network of protected areas Natura 2000. *Conservation Biology* 29: 260–270. <https://doi.org/10.1111/cobi.12366>
- Wesche K, Krause B, Culmsee H, Leuschner C (2012) Fifty years of change in Central European grassland vegetation: Large losses in species richness and animal-pollinated plants. *Biological Conservation* 150: 76–85. <https://doi.org/10.1016/j.biocon.2012.02.015>
- Würtenberger T (2010) Schutzgebietsausweisungen vs. Rechtssicherheit und Vertrauensschutz – Anmerkung zu dem Papenburg-Urteil des EuGH vom 14. 1. 2010. *Natur und Recht* 32: 316–320. <https://doi.org/10.1007/s10357-010-1861-5>

The assessment of significant effects on the integrity of “Natura 2000” sites under Article 6(2) and 6(3) of the Habitats Directive

Stefan Möckel¹

¹ Helmholtz Centre for Environmental Research – UFZ, Department of Environmental and Planning Law, Leipzig, Germany

Corresponding author: *Stefan Möckel* (stefan.moeckel@ufz.de)

Academic editor: *Jukka Similä* | Received 9 May 2017 | Accepted 2 October 2017 | Published 14 December 2017

<http://zoobank.org/9815D190-6298-4786-8674-826F25A39323>

Citation: Möckel S (2017) The assessment of significant effects on the integrity of “Natura 2000” sites under Article 6(2) and 6(3) of the Habitats Directive. In: Möckel S (Ed.) Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law. Nature Conservation 23: 57–85. <https://doi.org/10.3897/natureconservation.23.13602>

Abstract

This article investigates the question of how the significance of potential adverse effects on Natura 2000 sites – comprising sites of Community importance (SCI) and special protection areas (SPA) – can be determined legally and methodologically within the scope of appropriate assessments for projects and plans in accordance with Article 6(3) of the Habitats Directive 92/43/EEC¹ (HD) and whether the results can be transferred to the prohibition of disturbance and deterioration stipulated in Article 6(2) HD. The assessment of significance is important as, according to the European Court of Justice (ECJ)² and the German Federal Administrative Court (BVerwG)³, a project or plan is only permissible if, in the light of the best scientific knowledge in the field and without reasonable scientific doubt, the plan or project will not have lasting significant adverse effects on the integrity of that site. In this process, all aspects of the plan or project have to be identified which may, either independently or in combination with other plans or projects, affect the conservation objectives of the site concerned. This also includes a specialist forecast. Furthermore, closer

¹ Council Directive of 21.5.1992 on the conservation of natural habitats and of wild fauna and flora, OJEU no. L 206 of 22.7.1992, p. 7 *et seq.*

² All ECJ decisions can be located based on their file number and can be freely accessed under: eur-lex.europa.eu/juris/recherche.jsf?language=en.

³ From 2002 onwards, BVerwG decisions can be located based on their file number and can be freely accessed under: <http://www.bverwg.de/entscheidungen/entscheidungen.php>. References to the locations of earlier decisions are provided in this article.

specification is required of the threshold above which a non-significant adverse effect turns into a significant adverse effect and whether thresholds for bagatelles can be attributed to the proposed development.

Keywords

European Union (EU), Natura 2000, significant effects, appropriate assessment, impact assessment, prohibition of deterioration, Article 6(2) Habitats Directive, Article 6(3) Habitats Directive, cumulative impacts, thresholds, bagatelles, case law, ECJ, Germany, BVerwG

I. Introduction

In Article 6, the Habitats Directive prescribes a protective system for Natura 2000 sites that demands both developmental and management measures (paragraph 1) of EU Member States, as well as measures to guard against deterioration and disturbance (paragraph 2). It also requires an appropriate assessment for any project and plan that relates to its implications for a Natura 2000 site, in view of the site's conservation objectives (paragraph 3).⁴ The only exemptions from this are projects and plans directly connected with or necessary to the management of the site. The authorities must reject authorisation of all other projects and plans if significant adverse effects on the integrity of that site cannot be excluded either individually or in combination with other plans or projects. The ECJ has established strict requirements for determining compatibility:

*Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – 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. That is so where no reasonable scientific doubt remains as to the absence of such effects (...).*⁵

In line with the European Principle of Proportionality based on Article 5(4) of the Treaty on European Union (TEU), however, the Habitats Directive does not intend to prohibit all human activities that will have an adverse effect. This is why, on the one hand in Article 6(3), but also in Article 6(2) HD, only significant adverse effects or disturbances in a Natura 2000 site are relevant.⁶ Furthermore, Article 6(4) HD still allows Member States to authorise a project or plan as a derogation in cases where significant effects cannot be excluded with certainty, if it is supported by imperative reasons of

⁴ Details on the requirements of the appropriate assessment, Möckel Nature Conservation 2017b.

⁵ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 40. Similar to, e.g., ECJ, adjudication of 26.4.2017 – C-142/16, margin number 33, 57; adjudication of 14.1.2016 – C-399/14, margin number 43 *et seq.*, 48 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 20 *et seq.*; adjudication of 11.9.2012 – C-43/10, margin number 111 *et seq.*; adjudication of 7.9.2004 – C-127/02, margin number 41–49, 56–59.

⁶ *cf.* ECJ, adjudication of 14.4.2005 – C-441/03, margin number 27; BVerwG, decision of 23.4.2014 – 9 A 25.12, margin number 48; BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7, 12.

overriding public interest, including social and economic interests, no alternative solution is available and the Member State is taking all necessary compensatory measures to ensure that the overall coherence of the Natura 2000 network is protected.⁷ Member States are not permitted to tone down the Directive. Pursuant to Article 193 of the Treaty on the Functioning of the European Union (TFEU), they are only permitted to increase the level of protection.⁸

Both the appropriate assessment and the prohibition of disturbance are dependent on the determination of whether or not an adverse effect or disturbance is significant. A differentiation can be made between several types of negative effects that regularly occur in association with projects and plans.⁹ Article 6(3) HD stipulates, on the one hand, that the adverse effects of other projects and plans are also to be considered in this process and, on the other, that the assessment for compatibility is dependent on the conservation objectives that have been defined for each site. The focus of the conservation objectives are the favourable conservation status of the natural habitat types and species of Community interest listed in Annex I and II HD, as well as the bird species listed in Annex I BD and the migratory bird species, for which the site has been selected.¹⁰

In relation to the prohibition of disturbance, Article 6(2) HD simply stipulates that disturbances that could have a significant impact on the objectives of the Habitats Directive are to be avoided. More detailed provisions on the threshold for significance are missing in Article 6(2) and (3) HD. According to the ECJ, as a rule, the precautionary principle is to be adhered to during the assessment of potential adverse effects,¹¹ which is why significant adverse effects must be assumed if they cannot be excluded with certainty.

In relation to the appropriate assessment, the next section will explore which examination standards and methodological requirements must be applied for the determination of a significant adverse effect (see 2.1 and 2.2), to what extent existing and future cumulative impacts must also be considered in this process (see 2.3), how the threshold between significant and non-significant adverse effects is to be defined (see 2.4), and whether, and under what conditions, mitigation measures could be considered in the assessment of significant adverse effects (see 2.5). Finally, the question arises as to whether, in spite of the differences in wording in Article 6(2) and (3) HD, the criteria developed for determining a significant adverse effect within the scope of the appropriate assessment also apply to the prohibition of disturbance and potentially also to the provision for avoidance in Article 6(2) HD (see 3).

⁷ cf. the explanations in Möckel Nature Conservation 2017a.

⁸ ECJ, adjudication of 21.7.2011 – C-2/10, margin number 48–58.

⁹ cf. Möckel Nature Conservation 2017b; Therivel Environmental Impact Assessment Review 2009, 261 (265) for plans.

¹⁰ more detailed in Möckel Nature Conservation 2017b.

¹¹ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 48.

2. Judgment of significant effects in the appropriate assessment

2.1. Standards for the assessment

According to Article 6(3) HD, projects and plans are not permitted to have a significant impact on the integrity of Natura 2000 sites, either alone, or in combination with other plans and projects, which –based on the first sentence of paragraph 3 – requires an assessment of the compatibility with the conservation objectives that have been defined for the site concerned. The areas of habitat in the site containing protected habitats and species, including their relevant areas for withdrawal, resting, nesting and feeding,¹² as well as the species themselves, are pertinent to the assessment, i.e. their conservation status and their potential for improvement (*cf.* Article 1 i) HD). For this reason, even a possible obstruction of the flight and movement of protected species into other sites and habitats that are located outside a Natura 2000 site may constitute an adverse impact that is pertinent to the assessment.¹³

A significant adverse impact does not need to have taken place under Article 6(3) HD, rather more, the possibility that it is “likely to have” a significant adverse impact is sufficient.¹⁴ In this process, any threat of a disadvantageous adverse impact on the conservation objectives is essentially significant and must be rated as having “an adverse effect on the integrity of a site”.¹⁵ In addition, no specific intensity of the adverse impact on the conservation objectives is required,¹⁶ which is why using “significant adverse impact on the conservation objectives” deviates from the legally required standard.¹⁷ Furthermore, no strict evidence for causality is necessary. The probability that significant adverse impacts may arise from a proposed development is sufficient.¹⁸ A proposed development is permissible if no reasonable doubt remains that significant adverse impacts will be avoided based on the best scientific knowledge in the field.¹⁹

¹² ECJ, adjudication of 2.8.1993 – C-355/90 – Santoña, margin number 36; BVerwG, adjudication of 1.4.2004 – 4 C 2.03, text number 4.4.

¹³ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10; adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; adjudication of 20.10.2005 – C-6/04, margin number 34; adjudication of 7.9.2004 – C-127/02, margin number 43 *et seq.*; European Commission 2000, p. 33.

¹⁴ *cf.* ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 29 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 144.

¹⁵ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 20; adjudication of 7.9.2004 – C-127/02, margin number 49.

¹⁶ BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 84.

¹⁷ BVerwG, adjudication of 14.7.2011 – 9 A 12.10, margin number 84; adjudication of 17.1.2007 – 9 A 20.05, margin number 41 and headnote 2.

¹⁸ *cf.* ECJ, adjudication of 10.11.2016 – C-504/14, margin number 29; adjudication of 14.1.2016 – C-399/14, margin number 42 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 142.

¹⁹ settled case law ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 33; adjudication of 15.5.2014 – C-521/12, margin number 20 *et seq.*; adjudication of 11.4.2013 – C-258/11, margin number 29–41; adjudication of 11.9.2012 – C-43/10, margin number 111 *et seq.*; adjudication of 7.9.2004 – C-127/02, margin number 41–49, 56–59.

The requirement for necessary certainty gives the authorities no leeway for evaluations and estimates when determining significance.²⁰ However, there is still a certain margin of discretion, because the precautionary principle under European Community Law does not demand "zero risk" as it would never be possible to provide scientific evidence for this.²¹

The favourable conservation status is the crucial criterion for evaluation based on the conservation objectives for protected habitats and species under Article 1 e) and i) HD.²² The criteria given there and in Annex III Stage 1 provide important information on the problem of significance. Serious impacts on these ecological characteristics are prohibited.²³ A favourable conservation status for a habitat type or species must remain stable in spite of the implementation of the proposed development, while an existing poor conservation status must never deteriorate any further.²⁴ Stability denotes the capacity to regain the original equilibrium state after a disturbance and, therefore, short-term adverse impacts and deteriorations are less severe than long-term adverse impacts and deteriorations (so called resilience).²⁵ In addition to the type and scope of adverse impacts, the duration is thus also decisive for the question of significance. Apart from the conservation status of habitats or species, the existing and potential ecological functions and structures across the whole protected area are also important for the integrity of a Natura 2000 site concerned, which is why potential negative effects on these entities must be included in the judgement of significant effects.²⁶ The assessment of "site integrity" thus requires the complex task of understanding the ecosystem organisation at a location. The resilience of habitats and species, as well as of the ecological processes and functions in the site denote the legal and ecological definition of "site integrity" in the sense of Article 6(3) HD.²⁷

²⁰ cf. *Lees* JEL 2016, 191 (201).

²¹ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 41; adjudication of 6.11.2012 – 9 A 17.11, margin number 35; adjudication of 17.1.2007 – 9 A 20.05, margin number 60 and head-note 8; *Ureta* JEEPL 2007, 84 (88); for a broad value judgement *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 (381 *et seq.*, 390 *et seq.*); *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 (917).

²² ECJ, adjudication of 15.5.2014 – C-521/12, margin number 21; adjudication of 11.4.2013 – C-258/11, margin number 39; BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 28; adjudication of 12.3.2008 – 9 A 3.06, margin number 94; adjudication of 17.1.2007 – 9 A 20.05, margin number 42 *et seq.*

²³ cf. ECJ, adjudication of 11.4.2013 – C-258/11, margin number 43; adjudication of 24.11.2011 – C-404/09, margin number 163.

²⁴ settled BVerwG case law, adjudication of 3.5.2013 – 9 A 16.12, margin number 28; adjudication of 28.3.2013 – 9 A 22.11, margin number 41; adjudication of 17.1.2007 – 9 A 20.05, margin number 43.

²⁵ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 43, 45.

²⁶ cf. European Commission 2000, p. 40; *Möckel/Köck* JEEPL 2013, 54 (62 *et seq.*); *Rees et al.* Marine Pollution Bulletin 2013, 14 *et seq.*

²⁷ European Commission 2000, p. 40; *Rees et al.* Marine Pollution Bulletin 2013, 14 *et seq.*; *Owen* J.P.L. 2007, 10 (24).

Permanent land loss essentially always constitutes a significant adverse impact on protected habitat types, as a prerequisite to the favourable conservation status for a habitat type is that the area it covers in the site is stable or expanding.²⁸ A significant land loss may occur if the abiotic environmental conditions change, e.g. changes in groundwater levels or an influx of pollutants, in such a way that the plant and animal species that are characteristic for this type of habitat can no longer survive here.²⁹ The same principle applies if anthropogenic land use is intensified or changes (e.g. increased logging in a forest, more intensive fertilisation or the transformation of permanent grassland) and this results in previous habitat structures (e.g. dead wood, old trees) and species communities being removed or subject to significant change.³⁰

In the case of protected species, adverse impacts due to proposed developments, including stress factors, must never disturb the species-specific population dynamics to such an extent that a species can no longer form a viable component of the natural habitat that it belongs to and continue to do so in the long term.³¹ However, according to the BVerwG, not all land or habitat loss is always significant as this does not necessarily lead to deterioration in the conservation status for the protected species and, rather more, it is the stability of the population that is decisive.³² A significant adverse impact is only present once a species is reliant on the areas that would be lost and cannot migrate to other areas without qualitative and quantitative losses.³³ This also applies to typical species in the sense of Article 1 e) HD that are characteristic for a type of habitat, whereby the conservation status must remain favourable in that habitat type, in particular.³⁴ However, the differences in the handling of land loss in relation to habitat types and species in Natura 2000 sites must be regarded as critical

²⁸ BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 124–126; adjudication of 17.1.2007 – 9 A 20.05, margin number 50. cf. ECJ, adjudication of 11.4.2013 – C-258/11, margin number 43, 46; adjudication of 14.9.2006 – C-244/05, margin number 46. In detail *Wulfert et al.* 2015, p. 44 *et seq.*

²⁹ cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*; BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 97 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 71–73; adjudication of 29.9.2011 – 7 C 21.09, margin number 41 *et seq.*

³⁰ cf. Administrative Court of Augsburg, decision of 31.3.2014 – Au 2 S 14.81, margin number 23 *et seq.*; Administrative Court of Schwerin, decision of 4.6.2012 – 7 B 240/12; Administrative Court of Bayreuth, adjudication of 28.1.2010 – B 2 K 09.739; *Mühlbauer*, in: Lorz et al., *Naturschutzrecht*, 2013, § 34 BNatSchG margin number 3; *Pfohl* NuR 2013, 311, 315.

³¹ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 45. cf. ECJ on potential SCIs adjudication of 24.11.2011 – C-404/09, margin number 163; adjudication of 20.5.2010 – C-308/08, margin number 21; adjudication of 14.9.2006 – C-244/05, margin number 46.

³² cf. BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 132; adjudication of 6.11.2012 – 9 A 17.11, margin number 54.

³³ BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 132. Rejected due to a loss of 8.82 ha of area of little importance to hunting and roosting for the greater mouse-eared bat, given a total habitat area of 1,267.9 ha (BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 71 *et seq.*).

³⁴ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 83.

as the sites are designed to provide protected areas, such that a favourable conservation status is achieved across the entire biogeographical region.³⁵ Based on the severe adverse impacts and continued irreversible loss of habitats beyond the Natura 2000 sites, the natural range and proportion of habitat areas in Natura 2000 sites must be stable or increasing further (*cf.* Articles 1(e) and 3(1) HD). This is precisely the purpose of Article 6(2) and (3) HD.

In the event that the estimates on compatibility indicate that a positive development is still to be expected in relation to protected habitat types and species, even if the proposed development is realised, there is basically no adverse impact.³⁶ The BVerwG also wants to assume this for current poor conservation status by applying case law on species protection under the Habitats Directive.³⁷ This must be viewed in a critical light and cannot apply if the purpose of the conservation objective in question is the restoration of a favourable conservation status and the proposed development would result in substantial delays to this process, as this then has a significant adverse impact on the conservation objective.³⁸

Overall, significance is a conservation-specific question that must be solved based on the circumstances of each individual case and Natura 2000 site.³⁹ Social or economic interests that support the proposed development must only be considered within the scope of a derogating approval in accordance with Article 6(4) HD.⁴⁰ However, in practice, the assessment of significance is also not so simple due to the complexity of ecological relationships and mechanisms of action, as well as the interactions with the cumulative effects of other proposed developments. This is not only a difficult task for the authorities, but also for the courts if they must control the administrative decisions.⁴¹ Therefore, methodological questions (see 2.2) will be discussed and, in addition, the inclusion of the cumulative effects of projects and plans and other future developments (see 2.3). The thresholds related to bagatelles and irrelevance that have been developed by the BVerwG for minor effects also require an in-depth critical examination (see 2.4). Finally, the question arises on the extent to which mitigation measures or other compensatory measures can prevent significance and could be considered in the appropriate assessment (see 2.5).

³⁵ *cf. Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 30 *et seq.*

³⁶ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 167–170.

³⁷ BVerwG, decision of 23.1.2015 – 7 VR 6.14, margin number 27 with reference to EJC, adjudication of 14.6.2007 – C-342/05.

³⁸ similar to *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 10, 30; *Schumacher/Schumacher*, in: Schumacher/Fischer-Hüftle, BNatSchG, 2011, § 34 margin number 79.

³⁹ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 43; *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 (389).

⁴⁰ an extension of the appropriate assessment for socio-economic aspects, as suggested in *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 (390 *et seq.*).

⁴¹ *cf. Lees* JEL 2016, 191 (201 *et seq.*); *Floor/van Koppen/van Tatenhove* EnvSci 2016, 380 *et sqq.*

2.2. Methodological requirements

The certainty demanded by the ECJ with reference to the exclusion of significant adverse impacts requires a high methodological standard of examination, although article 6(3) HD does not specify methods for data collection or analysis for the conduct of the appropriate assessment.⁴² This requires an individual case evaluation that is essentially dependent on specialist conservation findings and assessments.⁴³ The assessment of the impacts must be based on the current state of scientific debate and the best relevant scientific knowledge in the field, including generally recognised empirical propositions and methods of investigation.⁴⁴ The European Commission⁴⁵ and also national authorities⁴⁶ in Germany have produced guidance to simplify the process of determining the relevant scientific knowledge. In Germany this guidance has been recognised by the BVerwG as a non-binding, but still important, tool for reaching decisions in court proceedings.⁴⁷ In practice in Germany and in other Member States, however, developers, authorities and even courts often encounter problems in fully meeting the requirements of the HD and the ECJ.⁴⁸

The required examinations in the relevant Natura 2000 site must consist of concrete observations that are based on these scientific insights and methods, and must allow precise and conclusive findings.⁴⁹ In Germany the BVerwG grants the authorities a subject-specific appraisal prerogative if multiple procedures for determination and assessment are recognised by the scientific field that use different methods and criteria for examination.⁵⁰

⁴² more detailed Möckel *Nature Conservation* 2017b.

⁴³ settled BVerwG case law, decision of 7.2.2011 – 4 B 48.10, margin number 6; adjudication of 12.3.2008 – 9 A 3.06, margin number 68 and adjudication of 17.1.2007 – 9 A 20.05, margin number 43.

⁴⁴ settled ECJ case law, adjudication of 11.9.2012 – C-43/10, margin number 113; adjudication of 26.10.2006 – C-239/04, margin number 20; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48; adjudication of 12.3.2008 – 9 A 3.06, margin number 73; adjudication of 17.1.2007 – 9 A 20.05, margin number 66 and headnote 9.

⁴⁵ see http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm.

⁴⁶ in Germany i.e. Wulfert *et al.* 2015; Lambrecht/Trautner 2007; Balla *et al.* 2013. The Federal Agency for Nature conservation set up a specialist online information system for impact assessments in SCIs in 2014 (<http://ffh-vp-info.de/FFHVP/Page.jsp>).

⁴⁷ BVerwG, decision of 23.4.2014 – 9 A 25.12, margin number 37, 66; adjudication of 6.11.2012 – 9 A 17.11, margin number 46; adjudication of 12.3.2008 – 9 A 3.06, margin number 125.

⁴⁸ cf. Milieu, IEEP and ICF 2016; Vassiliki *et al.* CoBi 2015, 260 (266 *et seq.*); Söderman Environmental Impact Assessment Review 2009, 79 *et seq.*

⁴⁹ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 50; adjudication of 15.5.2014 – C-521/12, margin number 27; adjudication of 11.4.2013 – C-258/11, margin number 44; adjudication of 24.11.2011 – C-404/09, margin number 100. Subsequent BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48. BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68.

⁵⁰ BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 73–75; adjudication of 14.7.2011 – 9 A 12.10, margin number 62; adjudication of 23.4.2014 – 9 A 25.12, margin number 26.

The judgment on whether a project might have significant adverse impacts on the integrity of a Natura 2000 site contains a forecast of the potential effects of the project or plan, based on the facts of the case and state of knowledge that pertained at the time of issuing the decision for authorisation.⁵¹ According to the BVerwG, a specialist scientific consultation on the risk analysis, risk forecasting and risk assessment forms the formal core of the appropriate assessment.⁵² The remaining uncertainties count against the authorisation of the project or plan.⁵³ Pursuant to the BVerwG, the appropriate assessment demands the exploitation of all scientific means and resources, but does not mean that research is to be initiated within the scope of the impact assessment to address gaps in knowledge and methodological uncertainties within the scientific field. Therefore, it is permissible to work with forecasting probabilities, conclusions by analogy, presumptions of truth and worst case scenarios, which must be justified and err on the "safe side".⁵⁴ A conservation concept with an effective risk management plan and appropriate monitoring could also help to overcome gaps in knowledge.⁵⁵

2.3. Inclusion of cumulative impacts

Even though Article 6(3) HD focuses on the compatibility and authorisation of the concrete proposed development, this evaluation must not be separated from the condition of the Natura 2000 site concerned and its protected habitats and species, as well as all other impacts.⁵⁶ The overall effects on the integrity of a site must be considered in the appropriate assessment, which is why cumulative impacts from other sources that the protected habitats or species are exposed to must also be included in the assessment of the significance of the effects of the proposed development.⁵⁷ This raises legal and

⁵¹ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 60 *et seq.*; BVerwG, decision of 6.6.2012 – 7 B 68.11, margin number 9; adjudication of 18.7.2013 – 4 CN 3.12, margin number 33.

⁵² BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 68 and headnote 12.

⁵³ explicitly, ECJ, adjudication of 11.9.2012 – C-43/10, margin number 112.

⁵⁴ settled BVerwG case law, adjudication of 6.11.2013 – 9 A 14.12, margin number 51; adjudication of 28.3.2013 – 9 A 22.11, margin number 41; adjudication of 14.7.2011 – 9 A 12.10, margin number 71; adjudication of 17.1.2007 – 9 A 20.05, margin number 64. cf. also the advanced standards for conclusions by analogy of the VGH Kassel, adjudication of 21.8.2009 – 11 C 318/08.T, www.openjur.de, margin number 243, which the following BVerwG has left open (BVerwG, decision of 14.4.2011 – 4 B 77.09, margin number 14, 19 *et seq.*) BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 41.

⁵⁵ settled BVerwG case law, adjudication of 6.11.2013 – 9 A 14.12, margin number 56; adjudication of 28.3.2013 – 9 A 22.11, margin number 95; adjudication of 12.3.2008 – 9 A 3.06, margin number 105; adjudication of 17.1.2007 – 9 A 20.05, margin number 64, 66, 53 of headnote 11.

⁵⁶ BVerwG, decision of 10.11.2009 – 9 B 28.09, margin number 3.

⁵⁷ cf. ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 56–63; adjudication of 7.9.2004 – C-127/02, margin number 53 *et seq.*; BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 88. Detailed information on practical questions on the assessment of cumulative effects *Therivell/Ross* EIAR 2007, 365 *et seq.*

practical difficulties.⁵⁸ In line with Article 6(3) HD, a proposed development is not eligible for authorisation if its impact alone would not cause any significant adverse effects, but the threshold for significance would be exceeded by the cumulative impact caused by all projects and plans. A distinction must be made here between:

- existing previous pressures within the site and
- cumulative impacts of other foreseeable projects and plans that are to be expected, but have not yet been realised.

Both of these factors must be added to the impacts of the proposed project or plan.⁵⁹ However, differences arise in relation to the question of the applicability of thresholds for bagatelles (see 2.4.2). Finally, the appropriate assessment must also consider:

- all foreseeable general changes that are to be expected in the future in relation to the protected habitats and species in the site (e.g. due to climate change), namely, both negative and positive changes.

2.3.1. Previous pressures

Previous pressures include the sum of negative effects of all land use practices and implemented developments, as well as existing long-range pollution.⁶⁰ The latter constitutes background pollution that can no longer be individually attributed. Previous pressures do not necessarily need to have already impaired the conservation status of protected habitat types or species within a site. Habitats and local populations may have coped up to now with the previous pressures without any noticeable impacts, but may be limited to a greater or lesser extent in their ability to tolerate additional pressures.⁶¹ An evaluation, guided by conservation objectives, of the additional pressures caused by the proposed development also considers previous pressures as this may result in the threshold of tolerance being exceeded and, put literally, be the final straw.⁶²

2.3.2. Potential impacts of other foreseeable projects and plans

Pursuant to the first sentence of Article 6(3) HD, future cumulative effects of other projects and plans must also be covered.⁶³ This raises multiple legal questions that are not

⁵⁸ cf. *Sundseth/Roth* 2013, 56, 92.

⁵⁹ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 76–80, 103–108; BVerwG decision of 28.11.2013 – 9 B 14.13, margin number 11; adjudication of 14.7.2011 – 9 A 12.10, margin number 81.

⁶⁰ cf. *Albrecht/Gies* NuR 2014, 235, 243; *Gärditz* DVBl 2010, 247, 248.

⁶¹ BVerwG, decision of 10.11.2009 – 9 B 28.09, margin number 3.

⁶² ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 56–63; BVerwG, decision of 10.11.2009 – 9 B 28.09, margin number 3; adjudication of 14.4.2010 – 9 A 5.08, margin number 88; adjudication of 29.9.2011 – 7 C 21.09, margin number 42.

⁶³ ECJ, adjudication of 24.11.2011 – C-404/09, margin number 76–80, 103–108; BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 11.

easy to answer. On the one hand, the question of how far advanced the planning for a project or plan that will have cumulative effects needs to be to ensure it is not prematurely included, but also not neglected.⁶⁴ On the other hand, the question arises on which proposed development takes precedence in cases where a mutually exclusive pressure situation would be created. Finally, differentiation from previous pressures is required.

There are diverging opinions on this in Germany. According to the BVerwG, other projects or plans are essentially only to be included if these have received legal or official authorisation but have not yet been realised or realised in full.⁶⁵ In the case of projects that do not require authorisation, the option of examining the activities for their compatibility with the conservation objectives for the protected area must be available, at minimum, for example, based on plans, concepts or an existing practice.⁶⁶ Conversely, a different viewpoint wishes to already include the impacts of projects in the authorisation procedure based on the current status.⁶⁷ In this process, however, according to the principle of chronological priority, only those projects and plans are relevant for which the authorisation documents were already fully available to the authorities beforehand.⁶⁸ In other words, whoever has submitted full documentation first will not have to contend with the consequences of subsequent proposed developments.

Both interpretations distribute the risks and costs of the examination differently between the competing proposed developments. The latter viewpoint is advantageous to the developer in that delays in the official procedure do not impinge on their position of chronological precedence. However, it is a disadvantage for the proponent that the impacts of other projects or plans which may ultimately not be authorised must also be included in the cumulative effects. This equates to a worst-case scenario. In contrast, the BVerwG interpretation states that only proposed developments that have actually received authorisation are to be included, whereby the realisation is also still pending in this case. The disadvantage here, however, is that proposed developments that receive the decision for authorisation at a later stage must also consider the impacts of all proposed developments that were authorised more rapidly, rendering obsolete any estimates of compatibility that were carried out previously and causing further delays to the procedure. This harbours the risk that the new cumulative effects will not be included for time reasons, or not considered in full, which is why it does not provide such a good level of protection of Natura 2000 sites from significant adverse effects.

⁶⁴ on the discussion in UK, cf. *Therivel* Environmental Impact Assessment Review 2009, 261 (265).

⁶⁵ BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 10 *et seq.*; adjudication of 14.7.2011 – 9 A 12.10, margin number 81; adjudication of 24.11.2011 – 9 A 23.10, margin number 40; adjudication of 21.5.2008 – 9 A 68.07, margin number 21.

⁶⁶ BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 55.

⁶⁷ Münster Higher Administrative Court, adjudication of 1.12.2011 – 8 D 58/08.AK, <http://www.justiz.nrw.de>, margin number 826. Similar to *Mühlbauer*, in: Lorz et al., *Naturschutzrecht*, 2013, § 34 BNatSchG margin number 6.

⁶⁸ Also *Mühlbauer*, in: Lorz et al., *Naturschutzrecht*, 2013, § 34 BNatSchG margin number 6; *Albrecht/Gies* NuR 2014, 235, 243.

The differentiation from previous pressures was considered as clarified in Germany. Developments that had been realised legitimately did not need to be included individually as a component of previous pressures in an assessment of cumulative effects.⁶⁹ However, the ECJ⁷⁰ Papenburg decision once again raises the question of the temporal limits of a project and of the attribution of previous pressures, at least for recurrent measures. All projects and plans that were approved and realised before their listing in sites of Community importance (SCI) or prior to protection in the case of special protection areas (SPA) always constitute part of the previous pressures.

2.3.3. General changes that are foreseeable and to be expected

The question arises as to whether and to what extent future changes in a Natura 2000 site must also be considered, that may occur due to natural processes or general anthropogenic influences during the assumed duration of the proposed development. This includes changes such as climate change, immigration of invasive species or specific compounds from long-range pollution (e.g. nitrogen, persistent chemicals). These may influence the conservation status of the protected habitat types and species, as well as their resilience to further impacts in the future.⁷¹ The appropriate assessment must include a forecast on whether or not a project or plan will have a significant adverse effect on a Natura 2000 site for the entire duration of the project.⁷² The forecast cannot simply be based on the current natural circumstances, but all future changes and trends that are foreseeable and to be expected in the site must be included in the forecast of significance, as the majority of the projects and plans that are to be examined are operated in the long term (e.g. infrastructure such as roads and railway lines) or will cause irreversible adverse effects (e.g. irreversible habitat loss in the case of surface mining).⁷³ Using the current situation in the site alone would result in an incorrect forecast. According to the precautionary principle, “foreseeable and to be expected” means that all developments are relevant that can neither be excluded with any certainty based on the current best scientific knowledge in the field, nor are purely theoretical in nature. Numerous impacts due to climate change must therefore be regarded as foreseeable. In this process, the period of projection must essentially extend across the entire assumed duration of operation and existence of the proposed development that is being examined.⁷⁴ In the case of irreversible adverse effects due to a proposed development or very long-term developments, temporal limits are imposed by predictions that can be scientifically justified.⁷⁵

⁶⁹ e.g. *Gärditz* DVBl 2010, 247, 248 with further references.

⁷⁰ ECJ, adjudication of 14.1.2010 – C-226/08.

⁷¹ cf. for climate change European Commission 2013; *Araujo et al.* Ecology Letters 2011, 484 et seq.

⁷² *Möckel* Nature Conservation 2017b.

⁷³ similar, *Therivel* Environmental Impact Assessment Review 2009, 261 (265); *Opdam/Broekmeyer/Kistenkas* EnvSci 2009, 912 (917); *Therivel/Ross* EIAR 2007, 365 (368 et seq., 376 et seq.).

⁷⁴ cf. *Therivel/Ross* EIAR 2007, 365 (377).

⁷⁵ on the prediction problems, cf. *Therivel/Ross* EIAR 2007, 365 (377 et seq.).

2.4. Thresholds of significance

The differentiation between significant and non-significant effects contains a threshold of significance, as significant effects on the integrity of the site concerned are only to be assumed once a specific intensity is exceeded.⁷⁶ In Germany, the BVerwG determines the threshold of significance on the basis of specific thresholds for pressures for the habitat or species concerned (see 2.4.1). The thresholds for pressures are to be determined scientifically for the specific affected habitat type or species in the relevant Natura 2000 site. Beyond these thresholds, the impacts act as stressors on the habitat or species and their status will be significantly impaired. A project or plan, which, individually or in combination with other proposed developments, would lead to an overshooting of the respective threshold of pressure, has significant adverse effects on the integrity of the site. However, the BVerwG has recognised an important limitation of this strict scientific concept of significance in practice. If the impacts of the proposed development remain below specific thresholds for bagatelles (see 2.4.2), then the BVerwG assume that no significant adverse effects exist, even in cases where thresholds for pressures are still exceeded. It appears doubtful that such an anticipated blanket release can be reconciled with the provisions of the Directive and ECJ case law.

2.4.1. Thresholds for pressures on protected habitat types and species

Each type of habitat and each species exhibits specific sensitivities to external impacts and changes, resulting in different thresholds for pressures, beyond which adverse effects are not tolerated prospectively. The BVerwG essentially considers any exceeding of these thresholds of pressures as a significant adverse effect.⁷⁷ The thresholds not only vary generally between the different types of habitat and species, but are also dependent on the concrete situation in the relevant Natura 2000 site and on the condition of the site's habitats and species. Furthermore, natural and anthropogenic pressures and stress factors that are present, either alone, or in combination, regularly reduce the tolerance towards further pressures.⁷⁸ Thresholds for pressures can therefore only be determined with the required certainty for a specific site alone.⁷⁹ In the event that these are already exceeded by previous pressures, then every further additional pressure essentially constitutes a significant adverse effect,⁸⁰ so long as no irrelevant bagatelles are recognised.

⁷⁶ cf. BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 56.

⁷⁷ settled case law cf. BVerwG, adjudication of 14.4.2010 – 9 A 5.08 margin number 91; decision of 10.11.2009 – 9 B 28.09, margin number 6; decision of 26.2.2008 – 7 B 67.07, margin number 10 and headnote 3; adjudication of 17.1.2007 – 9 A 20.05, margin number 43 *et seq.*

⁷⁸ BVerwG, decision of 10.11.2009 – 9 B 28.09, margin number 3.

⁷⁹ BVerwG, decision of 26.2.2008 – 7 B 67.07, margin number 10; European Commission 2000, p. 37; *Therivel* Environmental Impact Assessment Review 2009, 261 (265).

⁸⁰ BVerwG, adjudication of 14.4.2010 – 9 A 5.08, margin number 91; decision of 10.11.2009 – 9 B 28.09, margin number 3; adjudication of 17.1.2007 – 9 A 20.05, margin number 108. In agreement, e.g. *Schumacher/Schumacher*, in: *Schumacher/Fischer-Hüftle*, BNatSchG, 2011, § 34 margin number 76; *Gellermann*, in: *Landmann/Rohmer*, Umweltrecht, 2016, § 34 BNatSchG margin number 29.

Based on Article 1 i) HD, a species' favourable conservation status is dependent on viable population dynamics, a distribution area that is not decreasing and habitat that is adequate in size. The natural population dynamics and adaptability act as a buffer against change and stress factors (e.g. the loss of a local territory or an area of local habitat) to a certain extent, such that a deterioration in the conservation status of a local population is only to be expected above a threshold for pressure that is dependent on the concrete circumstances of each individual case.⁸¹ No significant adverse effect is present below this threshold. Pursuant to the BVerwG, retrogression in a population alone does not therefore constitute exceeding of the thresholds for pressure and is thus not a relevant adverse effect, so long as it can be assumed with certainty that this will remain a short-term episode.⁸²

Limits in relation to pressures can also be assumed for habitat types, where the long-term continued existence of areas, the required structure and specific functions, as well as the favourable conservation status of the typical species are decisive to their conservation status according to Article 1(e) HD.⁸³ In the case of pollution (e.g. nitrogen pollution), the BVerwG regards the concept of critical loads (CLs) as the most suitable method for determining these limits:⁸⁴

*CLs are scientifically established limits in relation to pressures that are to be understood as follows; they should provide a guarantee that the objects of protection will also incur no significant harmful effects in the long term (...). In the event that such limits are already reached or even exceeded by the previous pressures, then it follows that, on principle, any additional pressure is incompatible with the conservation objective and is thus significant as it exceeds the critical limit or enhances the harmful effects already associated with the previous pressures (...).*⁸⁵

In this process, the Court ranks modelled critical loads more highly than empirical critical loads.⁸⁶ It has simultaneously rejected criticism of individual parameters used in the calculation of critical loads because these cannot be subjected to an isolated examination as they are part of a scientifically recognised method.⁸⁷

⁸¹ cf. BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 45; adjudication of 16.3.2006 – 4 A 1075.04, BVerwG decision 125, 116, 321 *et seq.*; adjudication of 21.6.2006 – 9 A 28.05, BVerwG decision 126, 166, 178 *et seq.*

⁸² BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 45.

⁸³ cf. BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 48; *Rees et al.* Marine Pollution Bulletin 2013, 14 *et seq.*; *Lambrecht/Trautner* 2007, p. 68 *et seq.* More detailed in Möckel *Nature Conservation* 2017b.

⁸⁴ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 48; decision of 5.9.2012 – 7 B 24.12, margin number 7 *et seq.*; adjudication of 29.9.2011 – 7 C 21.09, margin number 41 and headnote 4; adjudication of 6.11.2012 – 9 A 17.11, margin number 93 with further references. For determination in individual cases cf. *Balla et al.* 2013, p. 123 *et seq.*

⁸⁵ BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7. Similar to BVerwG, adjudication of 29.9.2011 – 7 C 21.09, margin number 41.

⁸⁶ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 35–39; adjudication of 28.3.2013 – 9 A 22.11, margin number 61–65.

⁸⁷ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 44.

2.4.2. Thresholds for bagatelles in relation to adverse effects

Referring to the best scientific knowledge in the field, the BVerwG in Germany has recognised thresholds for bagatelles within the scope of the appropriate assessment, below which the impacts of a proposed development are irrelevant (therefore sometimes also called thresholds of irrelevance).⁸⁸ According to the Court, these are a manifestation of the principle of proportionality under European Community Law in Article 5(1) TEU and are also applicable if thresholds of pressures have already been exceeded by previous pressures.⁸⁹ Based on the BVerwG, they can also be applied when the conservation status for habitat types or species is already unfavourable.⁹⁰ They refer solely to the additional pressures on a site caused by the proposed development that is to be examined.⁹¹ Overall, they serve the purpose of excluding marginal adverse effects from the appropriate assessment without comprehensive investigations into thresholds for pressures or, if these are exceeded, based on standardised threshold values.⁹²

Although the BVerwG mainly justifies the thresholds for bagatelles with the principle of proportionality, the Court requires the derivation and determination of these thresholds to be based on a substantiated justification that uses a nature conservation approach.⁹³ In Germany, non-binding threshold values have now been compiled in a variety of scientific-administrative guidelines (called specialist conventions), referring to the best scientific knowledge and official working guidelines, differentiating between cut-off criteria and *de minimis* thresholds.⁹⁴ Cut-off criteria refer to the effect of a project on a Natura 2000 site and establish an absolute threshold below which no significant impairments are to be found, as early on as during the screening process, and therefore no appropriate assessment has to be carried out. By contrast, *de mini-*

⁸⁸ settled case law, most recently BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 45 with further references; decision of 6.3.2014 – 9 C 6.12, margin number 23; adjudication of 28.3.2013 – 9 A 22.11, margin number 65; adjudication of 29.9.2011 – 7 C 21.09, margin number 42; BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 49 f.

⁸⁹ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 62, 93 and headnote 3; adjudication of 12.3.2008 – 9 A 3.06, margin number 124; decision of 5.9.2012 – 7 B 24.12, margin number 7, 12.

⁹⁰ BVerwG, adjudication of 29.9.2011 – 7 C 21.09, margin number 44. BVerwG however in doubt, adjudication of 14.7.2011 – 9 A 12.10, margin number 65.

⁹¹ BVerwG, adjudication of 29.9.2011 – 7 C 21.09, margin number 42.

⁹² cf. BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 124; *Lambrecht/Trautner* 2007, p. 68 *et seq.*; *Wulfert et al.* 2015, p. 44 *et seq.*

⁹³ BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7; adjudication of 14.4.2010 – 9 A 5.08, margin number 92–95.

⁹⁴ *Wulfert et al.* 2015; *Lambrecht/Trautner* 2007; *Balla et al.* 2013; Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, Referentenentwurf Technische Anleitung Luft, 9.9.2016, p. 459 *et seq.*; *Garniell/Mierwald*, Arbeitshilfe Vögel und Straßenverkehr, Ergebnis des Forschungs- und Entwicklungsvorhabens FE 02.286/2007 LRB, 2010 (im Auftrag des Bundesministeriums für Verkehr, Bau und Stadtentwicklung); Bundesministerium für Verkehr, Bau und Stadtentwicklung, Arbeitshilfe Fledermäuse und Straßenverkehr, Entwurfsfassung 2011. See *Möckel* Nature Conservation 2017b.

mis thresholds define a relative threshold with respect to the thresholds for pressures. Based on these conventions, if the effects of the proposed development together with cumulative effects of projects and plans remain below a *de minimis* threshold for the site concerned, a significant effect can be rejected in the appropriate assessment. The BVerwG recognises these cut-off criteria and *de minimis* thresholds for the loss of area⁹⁵ and for nitrogen pollution⁹⁶.

For land losses, Lambrecht and Trautner – mandated by the Federal Agency for Nature Conservation (Bundesamt für Naturschutz) – recommend differentiated cut-off criteria for natural habitat types of Community interest and for habitats of species of Community interest. These criteria are dependent on habitat type or species and, subsidiary to this, a general *de minimis* threshold of a 1% loss of the total area of the habitat type or the species habitat in the Natura 2000 site concerned (or in a defined area).⁹⁷ In this process, the loss of area for habitat types is not based on the entire area covered by the Natura 2000 site, but on the available contiguous area of this type within the site.⁹⁸ Similarly, on request by the Federal Highway Research Institute (Bundesanstalt für Straßenwesen), Balla et al. defined thresholds for bagatelles for nitrogen with a cut-off criterion of 0.3 kg N per hectare per year and a *de minimis* threshold of 3 % of the critical nitrogen load for the respective habitat type or species.⁹⁹ Based on the BVerwG, it is possible to combine the thresholds for areas and nitrogen compounds.¹⁰⁰ Up to now, these thresholds for bagatelles have no normative legitimacy, which is why reasons in individual cases may justify deviations, such as the exceeding or undercutting of guideline values.¹⁰¹ Even so, they have great practical importance in Germany due to their recognition by the BVerwG as a scientifically based recommendation. They will receive more legitimacy if the Federal Government realises the amendment to the Technical Instructions on Air Quality Control¹⁰² (*Technische Anleitung zur Reinhaltung der Luft – TA Luft*), planned to be completed in 2017. The amendment aims to include requirements for the protection of Natura 2000 sites, in particular regarding nitrogen and sulphur inflows. According to the latest draft produced by the Ministry

⁹⁵ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 40 *et seq.*; adjudication of 13.5.2009 – 9 A 73.07, margin number 49; adjudication of 12.3.2008 – 9 A 3.06, margin number 125 *et seq.*; Lambrecht/Trautner 2007, p. 33 *et seq.*, 43 *et seq.*

⁹⁶ cf. BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 69; adjudication of 23.4.2014 – 9 A 25.12, margin number 45 *et seq.* with further references and headnote 1; adjudication of 6.11.2012 – 9 A 17.11, margin number 62 and headnote 3; adjudication of 29.9.2011 – 7 C 21.09, margin number 42.

⁹⁷ Lambrecht/Trautner 2007, p. 33 *et seq.*, 43 *et seq.*

⁹⁸ cf. BVerwG, adjudication of 13.5.2009 – 9 A 73.07 margin number 50.

⁹⁹ Balla et al. 2013, p. 94 *et seq.*, 211 *et seq.*; 216 *et seq.*

¹⁰⁰ BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 69; similar, Balla et al. 2013, p. 215 *et seq.*, 220 *et seq.*

¹⁰¹ settled BVerwG case law, adjudication of 6.11.2012 – 9 A 17.11, margin number 46 *et seq.*, 58; adjudication of 12.3.2008 – 9 A 3.06, margin number 126, 132.

¹⁰² http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Luft/taluft_engl.pdf.

for the Environment,¹⁰³ the stated cut-off criterion and de minimis threshold for nitrogen should be adopted and also applied for sulphur. The Technical Instructions on Air Quality Control constitute an administrative regulation that does not establish external obligations, in contrast to legislation or a legal ordinance. Nevertheless, it is mandatory for the internal licensing procedures of the competent authorities, given that Federal states have not established deviating legal or administrative regulations.

In spite of the legitimate fundamental concern, blanket thresholds for bagatelles that are site-independent cause a variety of difficulties, as the assessment of a proposed development must consider both the characteristics and conservation status specific to a site, as well as the other influences that exist within the site or are to be expected for the site.¹⁰⁴ The values for thresholds for bagatelles presented in specialist conventions and working aids for habitat types and species are general in nature and do not refer to the situation in the different Natura 2000 sites, which is why properties specific to a site, cumulative effects and interactions are not documented.¹⁰⁵ They therefore require adapting to the concrete conservation objectives and conditions within the Natura 2000 site concerned.¹⁰⁶ Due to the variety of additional effects in the site concerned and the related uncertainties in relation to knowledge, estimates of irrelevance and significance based on these non-site-specific thresholds for bagatelles can only be made with appropriate safety margins, to ensure that, in accordance with the precautionary principle, these estimates err on the side of safety and guarantee the required certainty on the absence of significant effects. In summary, with respect to Article 6(3) HD, the general and non-specific thresholds for bagatelles in Germany could therefore also only be used as non-binding guidance and are not legally standardised as anticipated exemptions for specific types of intervention.¹⁰⁷

Furthermore, in relation to thresholds for bagatelles, the question arises on how a creeping deterioration due to numerous proposed developments that are below this threshold can be prevented, which will result cumulatively in a significant adverse effects on the site concerned ("death by a thousand cuts").¹⁰⁸ The BVerwG intends to avoid this

¹⁰³ Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB), Entwurf zur Anpassung der Ersten Allgemeinen Verwaltungsvorschrift zum Bundes-Immissionsschutzgesetz (Technische Anleitung zur Reinhaltung der Luft – TA Luft) of 9 September 2016, (http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Luft/taluft_entwurf_bf.pdf) (accessed on 3 June 2017).

¹⁰⁴ Möckel Nature Conservation 2017c.

¹⁰⁵ critical, Fretzer Ecological Modelling 2016; Fretzer/Möckel Naturschutz und Landschaftsplanung 2015, 117.

¹⁰⁶ cf. BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 125 *et seq.*; Lambrecht/Trautner 2007, p. 38 *et seq.*

¹⁰⁷ More detailed on the ECJ requirements for statutory exemptions, Möckel Nature Conservation 2017c.

¹⁰⁸ cf. BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 12; Advocate-General E. Sharpston, final applications of 22.11.2012 – C-258/11, ECLI:EU:C:2012:743, margin number 67; in general Bastmeijer 2016, p. 387 (402).

by demanding the inclusion of the effects of other projects and plans that have not yet been realised, but are foreseeable and to be expected, in the thresholds for bagatelles.¹⁰⁹ In the Court's opinion, this is not counter to the principle of proportionality:

*In line with the provision in Article 6(3) HD, according to which proposed developments that could 'have an adverse effect on a protected area either individually, or in combination with other plans and projects' require an appropriate assessment, the legislator has expressed unequivocally that the compatibility of a project is not to be assessed in isolation based on the effects it produces, but under inclusion of the effects of other sufficiently established plans or projects. This provision pursues the objective of preventing a creeping adverse effect caused by sequentially approved projects, each of which are not deemed to have a significant adverse effect alone, insofar as their cumulative effects would have an adverse impact on the conservation objectives of the site, as elaborated on accurately by the lower court. An appropriate assessment will only consistently do justice to this objective if it also includes the effects of other sufficiently established projects within the site in the assessment of whether the threshold of relevance has been exceeded. The point here is also to ensure that additional adverse effects are averted, the sum of which negatively affects the conservation objectives, and can therefore no longer be understood as bagatelles. Otherwise, in the long term, a significant adverse effect on the protected site that could no longer be reversed is likely, which would be diametrically opposed to the conservation objective that is being pursued in the long term through the special statutory designation of a protected site and would contravene the prohibition of deterioration laid down in the Habitat Directive. Why the principle of proportionality should demand consideration of the threshold of relevance being exceeded based solely on the individual project cannot be inferred from this. The assumption of a threshold of relevance is an expression of the principle of proportionality, which would not apply to simply basing an assessment on the emission behaviour of one project without considering the threat posed by the impact of pollutants from other projects that have already been approved.*¹¹⁰

However, this means that developments that have already been realised and land use practices are still not being considered in the thresholds for bagatelles.¹¹¹ The consequence of this is that when there is a sufficiently long interval between two developments, the later development can make unconstrained reference to the threshold for bagatelles. Thereby, the threat of the creeping deterioration, that has been described by the BVerwG and is to be prevented based on Article 6(3) HD, is not excluded and the protection of the integrity of the Natura 2000 sites that is demanded by European Law is not suitably guaranteed. The thresholds for bagatelles are therefore in conflict with the obligations to protect the Natura 2000 sites and the strict requirements of the appropriate assessment. For example, if several developments that have adverse effects have already been realised within a site, then if the thresholds for bagatelles are applied

¹⁰⁹ BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 68; decision of 5.9.2012 – 7 B 24.12, margin number 12 and headnote.

¹¹⁰ BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 12.

¹¹¹ BVerwG, adjudication of 29.9.2011 – 7 C 21.09, margin number 42; adjudication of 6.11.2012 – 9 A 17.11, margin number 62, 93 and headnote 3.

to a further project, significant adverse impacts - i.e., an exceeding of the thresholds for pressures - can no longer be excluded with the required certitude, which is why the application of thresholds for bagatelles is inadmissible and the proposed development must be prohibited. The same certainly applies if the previous pressure already exceeds the thresholds for pressure and results in adverse effects that counter the relevant conservation objective.

Significant adverse effects could only be excluded with certainty if the effects of all developments that had already been realised after the listing of an SCI or after the designation of an SPA were taken into account in the application of thresholds for bagatelles.¹¹² Alternatively, the fairly large interval between different developments alone would always result in an assumption of irrelevance. The assumption of a threshold for bagatelles is therefore only justified if previous pressures are limited to the time up to listing or protection of the site. Lambrecht and Trautner therefore recommend systematic documentation to ensure that the changes due to projects and plans that have been carried out, including coherence measures, are remembered.¹¹³ This involves not only recording the adverse effects of plans and projects, but also positive trends within the site, as these may have raised the threshold for pressures in relation to new adverse effects, which is why new marginal impacts are then once again possible.¹¹⁴ Substantial, constantly increasing effort in relation to documentation that is prone to errors is to be assumed, which counters the purpose of the thresholds for bagatelles.

Overall, the recognition of thresholds for bagatelles related to interventions is to be rejected, given the practical difficulties and the questionable compatibility with the strict levels of protection required for Natura 2000 sites.¹¹⁵ This is also supported by the fact that the ECJ has shown itself to be sceptical towards any form of blanket exemption up to now and has only regarded this as permissible if adverse effects can also be excluded with certainty in individual cases.¹¹⁶ In this respect, blanket thresholds for bagatelles limit the requirement for an examination of individual cases to an extent that is too great, which is what Article 6(3) HD demands. They are also not required based on the principle of proportionality as, according to the ECJ¹¹⁷, this is safeguarded by the options for a derogating authorisation outlined in Article 6(4) HD.

¹¹² for example, *Lau* NuR 2016, 149, 151 *et seq.*; *Albrecht/Gies* NuR 2014, 235, 243; *Lambrecht/Trautner* 2007, p. 29.

¹¹³ *Lambrecht/Trautner* 2007, 29. For example, the State of North Rhine-Westphalia has created this kind of site-specific ongoing database for proposed developments (<http://www.naturschutzinformatioenen-nrw.de/fth-vp/de/start>).

¹¹⁴ *Lau* NuR 2016, 149, 152.

¹¹⁵ also critical *Schumacher/Schumacher*, in: Schumacher/Fischer-Hüftle, BNatSchG, 2011, § 34 margin number 77.

¹¹⁶ ECJ, adjudication of 10.1.2006 – C-98/03, margin number 41; adjudication of 26.5.2011 – C-538/09, margin number 41 *et seq.*; adjudication of 4.3.2010 – C-241/08, margin number 36. More detail in *Möckel* Nature Conservation 2017c.

¹¹⁷ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 136 *et seq.* This is also recognised by the BVerwG (e.g. adjudication of 17.1.2007 – 9 A 20.05, margin number 129 and headnote 16).

In conclusion, the appropriate assessment must be solely based on site-specific thresholds for bagatelles, which are to be determined in individual cases. If these are exceeded by a project or by the numerous adverse effects that are already present within the site and further foreseeable additional natural and anthropogenic impacts, then a significant adverse effect is present and the proposed development can only be authorised based on a derogating decision in accordance with Article 6(4) HD. For all the appropriate assessments in which there is an undisputed exceeding of, e.g., critical loads or other thresholds for pressures, a further increase in the load or impact is impermissible and could only be authorised in exceptional cases. The same also regularly applies when the conservation status of a protected habitat type or a protected species is currently bad, as it is then hardly possible to assume any tolerance towards additional adverse effects.

2.5. Mitigation measures

Finally, the question arises on the extent to which mitigation and compensatory measures and offsetting could also be considered in the assessment of the significance of adverse effects.¹¹⁸ Compensatory measures, in particular, often only develop their effects with a delay and their success can rarely be predicted with absolute certainty. In contrast, compensatory measures, which in the case of a derogation pursuant to Article 6(4) HD are necessary to ensure that the overall coherence of Natura 2000 is protected, are generally not regarded as suitable as they do not require implementation either on location or at a corresponding point in time.¹¹⁹ In 2014, the ECJ looked into this question in more detail in the *Briels* case and decided that only those protective measures are admissible that are designed to prevent or reduce potential harmful effects on the site that may be caused immediately, but not measures that serve the purpose of compensating for harmful adverse effects on a Natura 2000 site.¹²⁰ The debate still continues in literature, despite or through this ECJ decision.¹²¹

¹¹⁸ in favour of broad inclusion *Haumont* 2015, p. 93 (98); *McGillivray* JEEPL 2011, 329 (335 *et sqq.*); *Lees* JEL 2016, 191 (201 *et sqq.*) and *Therivel* Environmental Impact Assessment Review 2009, 261 (266 *et seq.*, 269 *et sqq.*), both refer to guidance and cases in the UK; as well as the BVerwG in the past, adjudication of 17.1.2007 – 9 A 20.05, margin number 53 *et seq.*; adjudication of 12.3.2008 – 9 A 3.06, margin number 94; adjudication of 28.3.2013 – 9 A 22.11, margin number 41; adjudication of 6.11.2012 – 9 A 17.11, margin number 35, 60. More restrictive, e.g. cf. *Lees* JEL 2016, 191 (199 *et sqq.*, 218); *Ureta* JEEPL 2007, 84 (90); *Schumacher/Schumacher*, in: *Schumacher/Fischer-Hüftle*, BNatSchG, 2011, BNatSchG, § 34 margin number 68; *Mühlbauer*, in: *Lorz et al.*, Naturschutzrecht, 2013, § 34 BNatSchG margin number 13.

¹¹⁹ cf. BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 54; *Schumacher/Schumacher*, in: *Schumacher/Fischer-Hüftle*, BNatSchG, 2011, § 34 margin number 68. In favour of inclusion, probably *Haumont* 2015, p. 93 (98).

¹²⁰ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 28 f. With a similar conclusion, also ECJ, adjudication of 29.1.2004 – C-209/02, margin numbers 24–28.

¹²¹ cf. *Schoukens* JEL 2017, 47 *et sqq.*; *Schoukens/Cliquet* E&S 2016, 10; *Lees* JEL 2016, 191 (200 *et sqq.*); *Cliquet/Decleer/Schoukens* 2015, p. 265 *et sqq.*; *McGillivray* 2015, p. 101 *et sqq.*; *Persson/Larsson/Villarroya* *Nature Conservation* 2015, 113 *et sqq.*; *et sqq.*

In its justification, the ECJ cites four convincing¹²² arguments.¹²³ Firstly, subsequent compensatory measures, which are not aimed at either avoiding or reducing the significant adverse effects for that habitat type, but tend to compensate for these effects after the event, do not guarantee that the project will not adversely affect the habitat. Secondly, the potential positive effects of the future creation of a new habitat - even if it is larger and qualitatively better - which is aimed at compensating for the loss of area and quality of the same type of habitat in a protected site, are highly difficult to forecast with any degree of certainty and, in any event, will be visible only several years into the future.¹²⁴ Thirdly, the requirement for the practical efficacy of protective measures also serves to prevent attempts of national authorities to circumvent the specific procedures planned in Article 6 HD. Fourthly, the derogation provision in Article 6(4) HD can apply only after the implications of a plan or project have been analysed in accordance with Article 6(3) HD, which requires accurate knowledge on these implications in the light of the conservation objectives relating to the site concerned and a precise identification of the damage. Even though the ECJ statements refer to adverse effects on a habitat type, these arguments apply equally to species and their habitats.

In 2016 and 2017, the ECJ confirmed this decision and further substantiated it.¹²⁵ Based on the reasons devised in the *Briels* case, the ECJ also classified developmental measures that occur prior to the realisation of the proposed development as non-admissible mitigation measures pursuant to Article 6(3) HD if the development of the other areas only be completed after the assessment of the significance of the given adverse effect on the site as such.¹²⁶ This is because neither the success of the developmental measures, nor the scope of the resulting mitigation measures can be established for the affected habitat types and species at the time of the assessment. Protective measures, aimed at avoiding or reducing direct adverse effects on the site, could only be taken into account within the appropriate assessment if definitive data prove the effectiveness of the measures at the time of authorisation and not if its effectiveness could only be confirmed following several years of monitoring.¹²⁷

In Germany, the ECJ decisions have effected a reorientation in BVerwG case law.¹²⁸ For allowable mitigation measures, the Court now demands that these must effectively prevent harmful impacts at the time of the realisation of the proposed development and that the conservation status must remain stable.¹²⁹ In the eyes of the Court, it is permissible to define the concrete mitigation measures only in the future plan for

¹²² also e.g. *Schoukens/Cliquet* E&S 2016, 10 (p. 9 *et seq.*). Critical *Lees* JEL 2016, 191 (200 *et seq.*).

¹²³ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 31–36.

¹²⁴ *cf.* the practical challenges of restoration and compensation measures *Schoukens/Cliquet* E&S 2016, 10 (p. 3 *et seq.*); *McGillivray* 2015, p. 101 (106 *et seq.*).

¹²⁵ ECJ, adjudication of 26.4.2017 – C-142/16, margin number 34 *et seq.*; adjudication of 21.6.2016 – C-387/15 and C-388/15, margin number 48, 54–58.

¹²⁶ ECJ, adjudication of 21.6.2016 – C-387/15 and C-388/15, margin number 48, 54–58.

¹²⁷ ECJ, adjudication of 26.4.2017 – C-142/16, margin number 37 *et seq.* Other opinion, *McGillivray* JEEPL 2011, 329 (349 *et seq.*).

¹²⁸ *cf.* BVerwG, decision of 16.9.2014 – 7 VR 1.14, margin number 18.

¹²⁹ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 60.

implementation if the permission contains corresponding ancillary provisions on the duty to add or change conditions at a later date.¹³⁰ However, on the one hand, there is the danger here that the appropriate assessment is based on assumptions that are too optimistic and, on the other hand, the possibility cannot be excluded that the subsequent measures are insufficiently suitable after all or that these measures do not or only partially result in the assumed effects.

According to the BVerwG, uncertainties in relation to the success of individual measures can be countered by risk management with monitoring – if necessary through an official order – as the effectiveness of many measures often depends on their incorporation into an overall concept.¹³¹ However, a critical view must also be taken of this, as follow-up risk management does not guarantee that adverse effects will never occur. The ECJ also took a sceptical view on subsequent risk management as a solution for uncertainties in the assessment.¹³² Risk management can only compensate for uncertainties if it includes ongoing observations and sufficient protective measures or adjustments close in time as only short-term adverse effects are then to be expected. During the appropriate assessment, further examination is required to determine whether these transitional adverse effects can be classified as non-significant without remaining uncertainties.

Overall, recognised mitigation measures include:

- protective measures to prevent collisions, such as speed limits, installations for deterrence, aids to cross over obstacles (e.g. green bridges, tunnels, fish ladders¹³³) and guidance installations (e.g. protective fences and walls, dams, planting),¹³⁴
- restrictions to operating and construction times (e.g. not at night or during specific seasons),¹³⁵
- reduction in the pollution caused by the proposed development (e.g. infiltration of road water run-off instead of direct feeding into water bodies, protective planting) or antedated or simultaneously acting reductions to other proposed developments and land uses.¹³⁶

Consideration of the following measures is to be rejected based on the ECJ decision if the successful outcome of the measure has not already occurred at the time of the appropriate assessment:

¹³⁰ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 59.

¹³¹ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 56; adjudication of 6.11.2012 – 9 A 17.11, margin number 37 *et seq.*

¹³² ECJ, adjudication of 26.4.2017 – C-142/16, margin number 39–44.

¹³³ left open in BVerwG, decision of 16.9.2014 – 7 VR 1.14, margin number 18.

¹³⁴ cf. ECJ, adjudication of 20.5.2010 – C-308/08, margin number 31–36, 42; BVerwG, decision of 23.1.2015 – 7 VR 6.14, margin number 28 *et seq.*; adjudication of 6.11.2013 – 9 A 14.12, margin number 56 *et seq.*

¹³⁵ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 54.

¹³⁶ cf. BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 34, 37 *et seq.*; Balla *et al.* 2013, p. 230 *et seq.*, 238 *et seq.*

- improvement and creation of new habitats and habitat areas, even if these are to be carried out at a substantially larger scale than the area that has been lost or adversely affected,¹³⁷
- translocation of protected species with small home ranges (e.g. great crested newt),¹³⁸
- replacement roosts/nesting sites such as nesting and bat boxes,¹³⁹
- demolition of existing transport routes which, on balance, does not result in greater adverse effects when compared with dispensing with the proposed development.¹⁴⁰

3. Determination of significance within the scope of Article 6(2) HD

Article 6(2) HD obliges Member States to avoid “the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive” in Natura 2000 sites. The wording in paragraph 2 therefore differs from paragraph 3. Even so, much of its content is indicative of the same level of protection as in the appropriate assessment.

According to the ECJ, paragraphs 2 and 3 are to guarantee the same level of protection for natural environments and species’ habitats.¹⁴¹ Based on Article 4(5) HD, after listing, paragraph 2 applies to SCIs¹⁴² or after the legally binding designation of an SPA within the meaning of Article 7 HD, as is the case for paragraph 3.¹⁴³ Section 2 contains a general obligation for protection¹⁴⁴ which forms the basis for an ongoing commitment by Member States.¹⁴⁵ In accordance with the precautionary principle, suitable measures here are primarily preventative measures, that are to be taken before

¹³⁷ different from BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 64 *et seq.*; decision of 13.3.2008 – 9 VR 10.07, margin number 27 *et seq.* More restrictive BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 420; adjudication of 6.11.2012 – 9 A 17.11, margin number 64.

¹³⁸ similar to *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, margin number 33. Different from BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 43 *et seq.* and headnote 1.

¹³⁹ different from BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 55; adjudication of 28.3.2013 – 9 A 22.11, margin number 128; adjudication of 13.5.2009 – 9 A 73.07, margin number 83.

¹⁴⁰ different from BVerwG, decision of 13.3.2008 – 9 VR 10.07, margin number 27 *et seq.*

¹⁴¹ cf. settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 52; adjudication of 15.5.2014 – C-521/12, margin number 19; adjudication of 11.4.2013 – C-258/11, margin number 32.

¹⁴² Article 4(5) HD. ECJ, adjudication of 14.1.2010 – C-226/08, margin number 49.

¹⁴³ for projects and plans in potential SCIs and non-designated SPAs, see *Möckel* Nature Conservation 2017b and *Möckel* Nature Conservation 2017c.

¹⁴⁴ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 33; adjudication of 14.1.2010 – C-226/08, margin number 49.

¹⁴⁵ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 37.

deterioration or disturbance occurs.¹⁴⁶ A deterioration or disturbance does not need to actually occur, rather more, the possibility that it could occur is sufficient.¹⁴⁷ Repressive measures are required to remove the causes and consequences if a deterioration or disturbance has occurred.¹⁴⁸

Based on the equivalent level of protection, Article 6(2) HD could also demand a subsequent review – carried out in accordance with the requirements of Article 6(3) HD – for projects that were already implemented or approved before the listing of an SCI or the designation as an SPA if there is no other way of achieving sufficient protection of the site or if, because of significant adverse effects, a derogation is to be granted in line with Article 6(4) HD.¹⁴⁹ The subsequent review must also take into account all factors existing at the date of inclusion and all implications arising or likely to arise following the partial or total implementation of the plan or project on the site in question after that date.¹⁵⁰ The circumstance that a realised development had permission or is not yet legally regulated does not justify any standards deviating from Articles 6(3) and 6(4) HD as the effective protection of Natura 2000 Sites would otherwise not be guaranteed.¹⁵¹ National procedural law and the protection of trust under this law do not exclude the application of new regulations on future impacts.¹⁵²

After all, the term “disturbance” means the same as “adverse effects”, as is the case in paragraph 3. The term “disturbance” also refers to anthropogenic activities with negative impacts, without the condition of being physical in nature. Disturbances may also be pollutants that have an impact on species. The term deterioration used in Article 6(2) HD is even more comprehensive as it fully covers adverse effects and disturbances of anthropogenic origin, but goes further than this by also including natural changes, according to the ECJ.¹⁵³ Member States are therefore also under the obligation to provide protective measures against deteriorations with natural causes, so long as this is possible and still proportionate pursuant to Article 5(4) TEU. However, as is the case for disturbances, a deterioration is only to be assumed in relation to the objectives stated in Article 2 HD as these constitute the standard for protection and thus for comparison.¹⁵⁴ Furthermore, it follows from the principle of proportionality that the obligations given

¹⁴⁶ ECJ, adjudication of 27.3.2009 – C-418/08, margin number 208 *et seq.*, 217; European Commission 2000, p. 25.

¹⁴⁷ *cf.* ECJ, adjudication of 24.11.2011 – C-404/09, margin number 144.

¹⁴⁸ *cf.* ECJ, adjudication of 13.12.2007 – C-418/04, margin number 208, 217; Epiney, in: *Epiney/Gammenthaler* 2009, p. 25.

¹⁴⁹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 33, 42–46, 54–62 and headnote 1–2. More details in *Möckel Nature Conservation* 2017c.

¹⁵⁰ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 60–62 and headnote 2.

¹⁵¹ ECJ, adjudication of 14.1.2010 – C-226/08, margin number 42–46; adjudication of 14.1.2016 – C-399/14, margin number 67–78; adjudication of 7.9.2004 – C-127/02, margin number 37.

¹⁵² ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68 *et seq.*

¹⁵³ ECJ, adjudication of 20.10.2005 – C-6/04, margin number 33 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 135.

¹⁵⁴ European Commission 2000, p. 26 *et seq.*

in paragraph 2 do not require action from Member States in relation to every single, even minor deterioration, but that a threshold of significance must first be exceeded.

The conservation objectives specific to the site are of particular importance, both for the identification of a disturbance or deterioration and in the determination of the significance. They render the general objectives of the Habitats Directive more concrete and must be laid down pursuant to Articles 4(4), 6(1) and 7 HD by the Member States in the designation of the protected area for each site, as well as in the management plans for the natural habitat types of Community interest and species of Community interest that are to be protected within the area.¹⁵⁵ Finally, when identifying the conservation objectives, in accordance with Article 4(4) HD, Member States must define priorities that are based on the importance of the site concerned to the preservation or restoration of a favourable conservation status for the habitat types and species of Community interest that occur within the site and for the coherence of the Natura 2000 network, as well as based on the extent to which this site is under threat of damage or destruction.¹⁵⁶ These site conservation objectives thus also constitute the standard for the protection of Natura 2000 sites from deterioration and disturbance, as is the case for the appropriate assessment.¹⁵⁷

Overall, numerous factors support the use of the same standard as the basis in Article 6(2) HD as in the appropriate assessment. The aspects and considerations illustrated in paragraph 2 can therefore be transferred to the determination of the significance of a deterioration or disturbance.

4. Conclusions

In conclusion, it can be noted that the assessment of significance is challenging and raises many questions due to the complexity of ecological relationships and mechanisms of action, as well as the interactions with the cumulative effects of other proposed developments and also other future developments, the consideration of mitigation measures and the subject-specific determination of significance thresholds. The ECJ and the Federal Administrative Court (BVerwG) in Germany have already partially contributed towards the simplification and clarification of the requirements of the appropriate assessment in numerous decisions they have taken. For example, comprehensive provisions have been developed for the identification and exclusion of potential negative effects and the handling of remaining uncertainties, and the admissible mitigation measures have been defined in greater detail. In Germany, at least, there is case law at the Supreme

¹⁵⁵ European Commission 2012b, p. 5; BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 75. For SPAs: ECJ, adjudication of 2.8.1993 – C-355/90, margin number 29-32; adjudication of 18.3.1999 – C-166/97, margin number 25.

¹⁵⁶ European Commission 2012a; European Commission 2012b, p. 2 *et seq.*; Cortina/Boggia Journal of Environmental Management 2014, 138 *et seq.*

¹⁵⁷ European Commission 2012a, p. 5; BVerwG, adjudication of 12.3.2008 – 9 A 3.06 margin number 72; adjudication of 17.1.2007 – 9 A 20.05, margin number 73 *et seq.*

Court level that governs which other projects and plans are to be included and simplifies the practical handling. However, the doubts raised under European Law are justified in relation to the attempts of the BVerwG to increase the feasibility of the assessment of significance through the recognition of blanket thresholds for bagatelles which are to apply even in cases of a bad conservation status and thresholds for pressures that have been exceeded. Furthermore, the question posed at the start on the transferability of standards relating to significance in Article 6(3) HD to the prohibition of disturbance and deterioration in Article 6(2) HD can be answered positively, with good reason.

Acknowledgements

The author thanks the reviewers for their very helpful comments and suggestions and Textworks Translations for the translation of the manuscript and the cited sections of decisions of the BVerwG.

References

- Albrecht J, Gies M (2014) Zulässigkeit von Unterhaltungsmaßnahmen an Infrastruktureinrichtungen und Gewässern in Natura 2000-Gebieten im Lichte der Rechtsprechung des EuGH. *Natur und Recht* 36: 235–246. <https://doi.org/10.1007/s10357-014-2623-6>
- Araujo MB, Alagador D, Cabeza M, Nogues-Bravo D, Thuiller W (2011) Climate change threatens European conservation areas. *Ecology Letters* 14: 484–492. <https://doi.org/10.1111/j.1461-0248.2011.01610.x>
- Balla S, Müller-Pfannenstiel K, Uhl R, Kiebel A, Lüttmann J, Lorentz H, Düring I, Schlutow A, Schleuschner T, Förster M, Becker C, Herzog W (2013) Untersuchung und Bewertung von straßenverkehrsbedingten Nährstoffeinträgen in empfindliche Biotope - Bericht zum FE-Vorhaben 84.0102/2009 der Bundesanstalt für Straßenwesen. Bundesanstalt für Straßenwesen, Forschung Straßenbau und Straßenverkehrstechnik Bd. 1099. Fachverl. NW in der Carl-Schünemann-Verl. GmbH, Bremen, 364 pp.
- Bastmeijer K (2016) Ecological restoration in international biodiversity law: a promising strategy to address our failure to prevent? In: Michael Bowman, Peter Davies, Edward Goodwin (Eds) *Research Handbook on Biodiversity and Law*. Edward Elgar, Cheltenham, 387–413. <https://doi.org/10.4337/9781781004791.00024>
- Cliquet A, Declerck K, Schoukens H (2015) Restoring nature in the EU: the only way is up? In: Born C-H, Cliquet A, Schoukens H, Misonne D, Van Hoorick G (Eds) *The Habitats Directive in its EU Environmental Law Context - European Nature's Best Hope?*, Routledge Research in EU Law. Routledge, London, New York, 265–284.
- Cortina C, Boggia A (2014) Development of policies for Natura 2000 sites: A multi-criteria approach to support decision makers. *Journal of Environmental Management* 141: 138–145. <https://doi.org/10.1016/j.jenvman.2014.02.039>

- Epiney A, Gammenthaler N (2009) Das Rechtsregime der Natura-2000-Schutzgebiete: ein Beitrag zur Auslegung des Art. 6 RL 92/43 und seiner Umsetzung in ausgewählten Mitgliedstaaten. Nomos, Baden-Baden, 401 pp. <https://doi.org/10.5771/9783845220147>
- European Commission (2000) Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, 73 pp.
- European Commission (2012a) Commission Note on setting conservation objectives for Natura 2000 sites, 8 pp.
- European Commission (2012b) Commission Note on the designation of Special Areas of Conservation (SACs) 8 pp.
- European Commission (2013) Guidelines on Climate Change and Natura 2000 - Dealing with the impact of climate change on the management of the Natura 2000 Network of areas of high biodiversity value. Technical Report Band 2013–068: 105 pp.
- Floor JR, van Koppen CSA, van Tatenhove JPM (2016) Uncertainties in the assessment of "significant effect" on the Dutch Natura 2000 Wadden Sea site - The mussel seed fishery and powerboat race controversies. *Environmental Science & Policy* 55: 380–392. <https://doi.org/10.1016/j.envsci.2015.03.008>
- Fretzer S (2016) Using the Ecopath approach for environmental impact assessment - A case study analysis. *Ecological Modelling* 331: 160–172. <https://doi.org/10.1016/j.ecolmodel.2015.09.022>
- Fretzer S, Möckel S (2015) Aussagekraft der Fachkonventionen - Erheblichkeit von Auswirkungen von Plänen und Projekten für Natura 2000. *Naturschutz und Landschaftsplanung* 47: 117–124.
- Gärditz KF (2010) Kein Bestandsschutz für rechtmäßig genehmigte Vorhaben im europäischen Naturschutzrecht? – Zu EuGH, Urt. v. 14. 1. 2010 – C-226/08 (Stadt Papenburg/ Deutschland). *Deutsches Verwaltungsblatt*: 247–250.
- Haumont F (2015) Appropriate impact assessment. In: Born C-H, Cliquet A, Schoukens H, Misonne D, Van Hoorick G (Eds) *The Habitats Directive in its EU Environmental Law Context - European Nature's Best Hope?*, Routledge Research in EU Law. Routledge, London, New York, 93–100.
- Lambrecht H, Trautner J (2007) Fachinformationssystem und Fachkonventionen zur Bestimmung der Erheblichkeit im Rahmen der FFH-VP. Bundesamt für Naturschutz, Bonn, 239 pp. http://www.bfn.de/fileadmin/MDb/documents/themen/natura2000/bfn-fue_ffh-flkv_bericht_und_anhang_juni_2007.zip
- Landmann Rv, Rohmer G (2016) *Umweltrecht – Umweltrecht: KrW-/AbfG, BBodSchG, BNatSchG, PRTR-Gesetz*. loose-leaf. ed., C.H. Beck, Munich, 81. supplement consignment.
- Lau M (2016) Die anderen „Pläne und Projekte“ in der FFH-Verträglichkeitsprüfung. *Natur und Recht* 38: 149–154. <https://doi.org/10.1007/s10357-016-2973-3>
- Lees E (2016) Allocation of Decision-Making Power under the Habitats Directive. *Journal of Environmental Law* 28: 191–219. <https://doi.org/10.1093/jel/eqw002>
- Lorz A, Konrad C, Mühlbauer H, Müller-Walter MH, Stöckel H (2013) *Naturschutzrecht – Naturschutzrecht mit Artenschutz und Europarecht/Internationales Recht*. 3. ed., C.H. Beck, Munich, 951 pp.
- McGillivray D (2011) Mitigation, Compensation and Conservation: Screening for Appropriate Assessment under The EU Habitats Directive. *Journal for European Environmental & Planning Law* 8: 329–352. <https://doi.org/10.1163/187601011X604230>

- McGillivray D (2015) Compensatory measures under Article 6(4) of the Habitats Directive. In: Charles-Hubert Born, An Cliquet, Hendrik Schoukens, Delphine Misonne, Geert Van Hoorick (Eds) *The Habitats Directive in its EU Environmental Law Context - European Nature's Best Hope?*, Routledge Research in EU Law. Routledge, London, New York, 101–118.
- Milieu, IEEP, ICF (2016) Evaluation Study to support the Fitness Check of the Birds and Habitats Directives, 668 pp.
- Möckel S (2017a) The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 87–116. <https://doi.org/10.3897/natureconservation.23.13603>
- Möckel S (2017b) The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 1–29. <https://doi.org/10.3897/natureconservation.23.13599>
- Möckel S (2017c) The terms “project” and “plan” in the Natura 2000 appropriate assessment. *Nature Conservation*. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 31–56. <https://doi.org/10.3897/natureconservation.23.13601>
- Möckel S, Köck W (2013) European and German Nature Conservation Instruments and their Adaptation to Climate Change - A Legal Analysis. *Journal for European Environmental & Planning Law* 10: 54–71. <https://doi.org/10.1163/18760104-01001004>
- Opdam PFM, Broekmeyer MEA, Kistenkas FH (2009) Identifying uncertainties in judging the significance of human impacts on Natura 2000 sites. *Environmental Science & Policy* 12: 912–921. <https://doi.org/10.1016/j.envsci.2009.04.006>
- Owen R (2007) European Nature Conservation Sites and the Appropriate Assessment of Plans and Projects. *Journal of Planning and Environment Law*: 10–73.
- Persson J, Larsson A, Villarroya A (2015) Compensation in Swedish infrastructure projects and suggestions on policy improvements. *Nature Conservation* 11: 113–127. <https://doi.org/10.3897/natureconservation.11.4367>
- Pfohl M (2013) Strafbarkeitsrisiken bei der Waldbewirtschaftung in Natura 2000-Gebieten. *Natur und Recht* 35: 311–316. <https://doi.org/10.1007/s10357-013-2453-y>
- Rees SE, Sheehan EV, Jackson EL, Gall SC, Cousens SL, Solandt JL, Boyer M, Attrill MJ (2013) A legal and ecological perspective of ‘site integrity’ to inform policy development and management of Special Areas of Conservation in Europe. *Marine Pollution Bulletin* 72: 14–21. <https://doi.org/10.1016/j.marpolbul.2013.03.036>
- Schoukens H (2017) Habitat restoration measures as facilitators for economic development within the context of the eu habitats directive: Balancing no net loss with the preventive approach? *Journal of Environmental Law* 29: 47–73. <https://doi.org/10.1093/jel/eqw028>
- Schoukens H, Cliquet A (2016) Biodiversity offsetting and restoration under the European Union Habitats Directive: Balancing between no net loss and deathbed conservation? *Ecology and Society* 21: 14. <https://doi.org/10.5751/ES-08456-210410>

- Schumacher J, Fischer-Hüftle P (2011) BNatSchG – Bundesnaturschutzgesetz Kommentar. 2. ed., Kohlhammer, Stuttgart, 1043 pp.
- Söderman T (2009) Natura 2000 appropriate assessment: Shortcomings and improvements in Finnish practice. *Environmental Impact Assessment Review* 29: 79–86. <https://doi.org/10.1016/j.eiar.2008.04.001>
- Sundseth K, Roth P (2013) Study on Evaluating and Improving the Article 6.3 Permit Procedure for Natura 2000 Sites. Europäische Kommission, 104 pp. http://ec.europa.eu/environment/nature/natura2000/management/docs/AA_final_analysis.pdf
- Therivel R (2009) Appropriate assessment of plans in England. *Environmental Impact Assessment Review* 29: 261–272. <https://doi.org/10.1016/j.eiar.2009.01.001>
- Therivel R, Ross B (2007) Cumulative effects assessment: Does scale matter? *Environmental Impact Assessment Review* 27: 365–385. <https://doi.org/10.1016/j.eiar.2007.02.001>
- Ureta AG (2007) Habitats Directive and Environmental Assessment of Plans and Projects. *Journal for European Environmental & Planning Law* 2: 84–94. <https://doi.org/10.1163/187601007X00091>
- Vassiliki K, Hovardas T, Dieterich M, Ibisch PL, Mihok B, Selva N (2015) The challenge of implementing the European network of protected areas Natura 2000. *Conservation Biology* 29: 260–270. <https://doi.org/10.1111/cobi.12366>
- Wulfert K, Lau M, Widdig T, Müller-Pfannenstiel K, Mengel A (2015) Standardisierungspotenzial im Bereich der arten-und gebietsschutzrechtlichen Prüfung, FuE-Vorhaben FKZ 3512 82 2100 im Auftrag des BfN. BfN, 456 pp. http://www.bfn.de/fileadmin/BfN/ein-griffsregelung/Dokumente/Standardisierungspotenzial_Arten-_und_Gebietsschutz_1.pdf

The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests

Stefan Möckel¹

¹ *Helmholtz Centre for Environmental Research – UFZ, Department of Environmental and Planning Law, Leipzig, Germany*

Corresponding author: *Stefan Möckel* (stefan.moeckel@ufz.de)

Academic editor: *D. Evans* | Received 9 May 2017 | Accepted 6 December 2017 | Published 14 December 2017

<http://zoobank.org/C19D5954-15ED-458C-808D-79E66609CA76>

Citation: Möckel S (2017) The European ecological network “Natura 2000” and its derogation procedure to ensure compatibility with competing public interests. In: Möckel S (Ed.) Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of the courts. Nature Conservation 23: 87–116. <https://doi.org/10.3897/natureconservation.23.13603>

Abstract

Natura 2000 network covers over 18 percent of the land area in the European Union. All proposals for development affecting these sites must be previously assessed for their implications for the site’s conservation objectives. In cases where it cannot be ascertained that there is no adverse effect on the integrity of a Natura 2000 site, the proposal for development can now only be approved within the scope of a derogation assessment pursuant to Article 6(4) of the Habitats Directive 92/43/EEC¹ (HD). This article explores the requirements for an approval for derogation. In addition to the decisions of the European Court of Justice (ECJ)² and the European Commission guidelines on this issue, this article focuses, in particular, on the comprehensive German Federal Administrative Court (BVerwG)³ decisions on this matter, which has had to assess a substantially greater number of cases to date, and provides a critical discussion on this in relation to the conservation aims of the Habitats Directive.

¹ Council Directive of 21.5.1992 on the conservation of natural habitats and of wild fauna and flora, OJEU no. L 206 of 22.7.1992, p. 7 *et seq.*

² All ECJ decisions can be located based on their case number and can be freely accessed under: eur-lex.europa.eu/juris/recherche.jsf?language=en.

³ From 2002 onwards, BVerwG decisions can be located based on their case number and can be freely accessed under: <http://www.bverwg.de/entscheidungen/entscheidungen.php>. References to the locations of earlier decisions are provided in this article.

Keywords

European Union (EU), Natura 2000, appropriate assessment, impact assessment, derogation procedure, Article 6(4) Habitats Directive, Birds Directive, imperative reasons of overriding public interest (IROPI), assessment of alternatives, compensatory measures, coherence, case law, ECJ, Germany, BVerwG

I. Introduction

The ecological network “Natura 2000” constitutes the common European heritage and, in 2017, covers over 27,500 sites that protect more than 789,000 km² of the terrestrial area in the EU (approx. 18.15%) and around 395,000 km² of European marine territory. It contains the Sites of Community Importance (SCIs) brought into being by Article 4 HD and the Special Protection Areas (SPAs) in Article 4 of the Birds Directive 79/409/EEC⁴ (BD) (newly codified in Directive 2009/147/EU⁵).⁶ It is designed to maintain or restore a favourable conservation status for the protected habitat types and species (Article 3 HD, similar to Article 2 BD), including SPAs and birds (*cf.* Article 2 no. 1 a) Environmental Liability Directive 2004/35/CE⁷). In addition to the designation and management of these sites, under Article 6(3) HD, those plans and projects, which are not directly connected with or necessary to the management of the site, but likely to have a significant effect on the integrity of a Natura 2000 site must be the subject of an appropriate assessment. In accordance with ECJ case law, authorisation for such proposed developments may be given only on condition that the competent authorities – once all aspects of the plan or project have been identified which may, independently 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.⁸ This means that no reasonable scientific doubt remains as to the absence of such effects. These strict requirements are mitigated by the option for a derogating authorisation in favour of other public interests in line with Article 6(4) HD. Among other legislation, the derogation arises from the European Principle of Proportionality⁹ pursuant to Article 5(4) of the Treaty on European Union (TEU).

⁴ Council Directive of 2.4.1979 on the conservation of wild birds, OJEU n. L 103 of 25.4.1979, p. 1 *et seq.*

⁵ Directive on the conservation of wild birds, adopted by the European Parliament and Council on 30.11.2009, OJEU no. 20 of 26.1.2010, p. 7 *et seq.*

⁶ European Commission 2017, p. 8 *et seq.*

⁷ Directive on environmental liability with regard to the prevention and remedying of environmental damage, adopted by the European Parliament and Council on 21.4.2004, OJEU no. L 143 of 30.4.2004, p. 56 *et seq.*

⁸ e.g. ECJ, adjudication of 26.4.2017 – C-142/16, margin numbers 33; adjudication of 15.5.2014 – C-521/12, margin number 20 *et seq.*; adjudication of 11.4.2013 – C-258/11, margin number 41; adjudication of 7.9.2004 – C-127/02, margin number 41–49, 56–59.

⁹ *cf.* ECJ, adjudication of 14.4.2005 – C-441/03, margin number 27; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 48; BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7, 12.

If the assessment under Article 6(3) HD comes to the conclusion, that adverse effects on the integrity of a Natura 2000 site cannot be excluded without reasonable scientific doubts, a project or plan can therefore be still authorised, if the conditions for derogation are fulfilled.

In cases of priority natural habitat types or priority species of Annex I and II of the Habitats Directive, an exemption is only justified by considerations associated with human health and public safety or has beneficial consequences of primary importance for the environment or further to an opinion from the Commission. It is not just the appropriate assessment,¹⁰ but also the derogation assessment that requires comprehensive investigation and raises diverse legal and practical questions.¹¹ The European Commission has produced guidance and memoranda¹² to aid Member States in their application of Article 6 HD. In 2012, the Commission published the second summary report on the implementation of Article 6(4) HD from 2007–2011, with a focus on the first subparagraph. The report notes that the improvement in the quality of the information – provided by only six Member States – is still not enough with respect to the project's estimated potential adverse effects (including cumulative impacts), the mitigation measures, the assessment of alternatives, the justification with imperative overriding public interest and the possible effectiveness of the compensatory measures.¹³ In the Fitness Check 2016 these problems still remain.¹⁴

The European Commission also commissioned an evaluation study to investigate how the appropriate assessment is used in the Member States.¹⁵ In this study, the authors *Sundseth* and *Roth* only touched briefly on the use of the derogation procedure in Article 6(4) HD. They determined inconsistent use in the EU in relation to this:

According to both the online surveys and the structured interviews, it seems that the derogation procedure under Article 6.4 is rarely used. The Commission's own statistics seem to indicate the same trend. In addition only 20 Commission Opinions have been issued under Article 6.4 in the last 20 years and all but one of these was positive. It also varies from one country to another, with countries like Germany tending to use it more often than others.

There may be several reasons for the limited use of Article 6.4: solutions are found through mitigation in Article 6.3, good alternatives are available, IROPI [author: imperative reasons of overriding public interest] test not fulfilled, compensation measures too expensive or onerous....

But there does also seem to be an aura of fear about the use of Article 6.4 that it will lead to considerable delays and extra expenses. Some countries seem to try to push everything through under Article 6.3 to avoid having to use 6.4. and may fudge the differentiations between mitigation measures and compensation measures, either deliberately (to speed up

¹⁰ see Möckel Nature Conservation 2017.

¹¹ Milieu, IEEP and ICF 2016, p. 104 *et seq.*; European Commission 2012a; European Commission 2001; Jackson Journal of Environmental Law 2014, 495 *et seq.*

¹² can be accessed on http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

¹³ European Commission 2012b.

¹⁴ Milieu, IEEP and ICF 2016, p. 104 *et seq.*

¹⁵ *Sundseth/Roth* 2013.

the process) or because of a basic lack of understanding of the differences between the two (which in turn can be due to the fact that the Article 6.4 procedure is so rarely used so there is little practical experience to guide them) or because there is a lack of political will to take the Article 6.4 route.

Another reason might be (mentioned occasionally in the literature but not raised explicitly during the structured interviews) that a number of Natura 2000 habitat types and species, are extremely difficult to compensate because of their inherent nature.¹⁶

The fact that the European Commission has only issued 20 opinions in line with Article 6(4) subparagraph 2 in the past 24 years since the Habitats Directive was enacted, of which 14 affected Germany, is also indicative of minimal use of the derogation procedure.¹⁷ From a German perspective, these statements by *Sundseth* and *Roth* on the derogation procedure therefore appear surprising, as derogating authorisations are commonly issued in Germany in cases where a plan or project has been determined to be incompatible and this practice is not the exception, but the rule. Decisions of the BVerwG are largely responsible for this, as the court interprets the requirements for a derogating authorisation such that projects that are in the public interest are regularly permitted, if necessary after a second attempt, with improved justification and compensatory measures to ensure the overall coherence of Natura 2000. This case law is highly advantageous to planning certainty and realisation of proposals for development, especially for large infrastructure projects like motorways, railway lines and airports,¹⁸ but associated with not insubstantial disadvantages for the Natura 2000 site in question, the entire network and the aims of the Habitats Directive and Birds Directive, in spite of the measures to ensure coherence. Such compensation measures must be stated in the permission with a high probability of effectiveness, but must not be realised before the implementation of the project or plan. Coherence measures in Germany therefore often compensate for the negative effects of a proposed development only after a lengthy period of time, as e.g. replacement habitats must first develop and be colonised by the desired plant and animal species.¹⁹ This approach harbours risks, because, although many things are possible from a technical and logistical perspective, the development of habitat structures and species can nevertheless not be planned or predicted with a one hundred percent guarantee due to the complexity of ecosystems.²⁰ Certain invasive interventions, for example cutting through Natura 2000 sites, may possibly ultimately be mitigated with specific measures (e.g. with green bridges, tunnel systems). The protection of the integrity of Natura 2000 sites therefore continues to be

¹⁶ *Sundseth/Roth* 2013, p. 63.

¹⁷ European Commission, European Commission Opinions relevant to Article 6 (4) of the Habitats Directive, http://ec.europa.eu/environment/nature/natura2000/management/opinion_en.htm (accessed on 2.5.2017). See also *McGillivray* 2015, p. 101 (109 *et seq.*).

¹⁸ see assessment of the German Minister of Environment and Nuclear Safety, cited in *Sundseth/Roth* 2013, p. 28.

¹⁹ *cf. McGillivray* 2015, p. 101 (106 *et seq.*).

²⁰ ECJ, adjudication of 15.5.2014 – C-521/12 – Briels, margin number 32; adjudication of 21.7.2016 – C-387/15 and C-388/15 – Vlaams Gewest, margin number 52–56.

the most important measure for achieving and safeguarding favourable conservation status for the habitat types and species in Annexes I and II HD.²¹ The aims of Article 2 and 3 HD must thus be considered in the application and interpretation of Article 6(3) and (4) HD. For SPAs, the validity of Article 6(3) and (4) HD is beneficial for projects and plans as the exceptional reasons explicitly mentioned in Article 6(4) HD are more wide-ranging than exemptions under Article 4(4) BD.²² In this case, the ECJ only recognises exemption due to outstanding public reasons like the protection of human life and health or public safety, but not for social or economic interests, as outlined in Article 6(4) HD.²³

The requirements of Article 6(4) HD are not so often subject of ECJ decisions and in the English literature.²⁴ This article therefore sets out to explore the derogation procedure in more detail. Its interpretation by the ECJ and the information provided by the European Commission will be taken into consideration, insofar as available. Given the well-advanced experiences in Germany, the focus will, nevertheless, be on the interpretation in this country, particularly by the BVerwG. This interpretation will be introduced based on the individual conditions in Article 6(4) HD and will be the subject of a critical discussion within the meaning of the objectives of the Habitats Directive and Birds Directive.

2. Overview of the requirements of Article 6(4) HD

If a project or plan must be prohibited in accordance with Article 6(3) HD, the responsible authority may overrule this and authorise a proposed development under the standard conditions given in Article 6(4) HD. Article 6(4) HD is a manifestation of the Principle of Proportionality under European Community Law in Article 5(4) TEU as well as of the aims of sustainable development within the meaning of Article 11 of the Treaty on the Functioning of the European Union (TFEU).²⁵

²¹ European Commission 2015b, p. 16 *et seq.*; European Commission 2015a p. 5 *et seq.*; EEA 2015, p. 119 *et seq.*

²² *cf.* ECJ, adjudication of 11.7.1996 – C-44/95, margin number 37; BVerwG, adjudication of 18.7.2013 – 4 CN 3.12, margin number 29 *et seq.*; adjudication of 17.1.2007 – 9 C 20.05, margin number 129. More detailed in Möckel JEEPL 2014, 392 (402 *et seq.*, 405 *et seq.*).

²³ ECJ, adjudication of 28.1.1991 – C-57/89, margin number 22 *et seq.*; adjudication of 2.8.1993 – C-355/90, margin numbers 19 and 45; adjudication of 18.12.2007 – C-186/06, margin number 37. Following BVerwG, adjudication of 16.3.2006 – 4 A 1075.04, margin number 550; adjudication of 1.4.2005 – 4 C 2.03, margin number 40.

²⁴ *cf.* McGillivray 2015, p. 101 *et seq.*; Jackson Journal of Environmental Law 2014, 495 *et seq.*; McGillivray Journal of Environmental Law 2012, 417 *et seq.*; Clutton/Tafur 2012, 167 *et seq.*; Krämer Journal of Environmental Law 2009, 59 *et seq.*; Unnerstall European Environment 2006, 73 *et seq.* See also reviews in Sundseth/Roth 2013, 101 *et seq.* and Blicharska *et al.* Biological Conservation 2016, 110 *et seq.*

²⁵ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10, margin number 136 *et seq.*

The conditions for a derogation are:

- The plan or project must be carried out for imperative reasons of overriding public (IROPI), including those of a social or economic nature.
- There is no alternative solution.
- The Member State takes all compensatory measures required to ensure that the overall coherence of the Natura 2000 network is protected.

Counter to the view of the European Commission,²⁶ imperative reasons of overriding public interest are to be determined and weighed up based on the sequence laid down in Article 6(4) HD (German version)²⁷ and § 34(3) of the Federal Nature Conservation Act (BNatSchG) prior to the assessment of alternatives as these simultaneously constitute the benchmark for the assessment of alternatives (see 4).²⁸ Furthermore, a derogating authorisation requires a full appropriate assessment in line with Article 6(3) HD.²⁹ The potential damage to the site must be precisely identified, because the weighing up against the imperative reasons of overriding public interest, the search for less harmful alternatives and the determination of the compensatory measures require the qualitative and quantitative extent of the affects to be ascertained exactly.³⁰ In cases where these conditions are fulfilled, the decision on the derogation can nevertheless be taken at the discretion of the responsible authority.³¹ This also includes the initiation of the derogation procedure. However, the authority and developers essentially have no discretionary power and scope for judgement in relation to the question of whether the requirements are fulfilled.³²

In their form as an exemption, Article 6(4) HD and the requirements specified therein are to be narrowly interpreted.³³ The interpretation and application of Article

²⁶ European Commission 2012a, p. 7 *et seq.*

²⁷ In the English, French and Spanish versions, however, the alternatives are mentioned first.

²⁸ see also ECJ adjudication of 11.9.2012 – C-43/10, margin number 114; adjudication of 26.10.2006 – C-239/04, margin number 34.

²⁹ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 56 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 11.4.2014 – C-258/11 margin number 35; adjudication of 16.2.2012 – C-182/10 margin number 74 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 109, 157.

³⁰ cf. ECJ, adjudication of 15.5.2014 – C-521/12 – Briels, margin number 36; adjudication of 24.11.2011 – C-404/09, margin number 109; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 392.

³¹ cf. ECJ, adjudication of 4.3.2010 – C-241/08, margin number 72; adjudication of 26.10.2006 – C-239/04, margin number 25; adjudication of 21.7.2016 – C-387/15 and C-388/15 – Vlaams Gewest, margin number 63.

³² BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 15; adjudication of 6.11.2013 – 9 A 14.12, margin number 74; decision of 3.6.2010 – 4 B 54.09, margin number 9. Differing BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 19 for proposed developments for national defence.

³³ settled ECJ case law, adjudication of 14.1.2016 – C-399/14, margin number 73; adjudication of 20.9.2007 – C-304/05, margin number 83; adjudication of 26.10.2006 – C-239/04, margin number 35.

6/4) HD must not endanger the aims of the Habitats Directive and the Birds Directive, mentioned in Articles 2 and 3 HD and Article 2 and 3 BD. The requirements cannot be circumvented, e.g. through an incorrect application of an appropriate assessment pursuant to Article 6(3) HD.³⁴ Conversely, the strict benchmarks developed by the ECJ for Article 6(3) HD must also be applied to paragraph 4.³⁵ Above all, the derogation assessment requires a full specialist conservation investigation and evaluation and consideration of the project-related adverse impacts on the site.³⁶ According to the BVerwG, a derogating authorisation shall only be granted if the greatest possible care is taken to protect the affected site.

*Based on its derogating nature, Article 6(4) of the Habitats Directive establishes an avoidance rule that shall be strictly adhered to and cannot simply be breached at the expense of the integrity of the coherent system, as stipulated by Article 4 of the Habitats Directive, if this appears justifiable based on the pattern of rules for consideration given in German Planning Law, but can only be thrust aside if this is compatible with the concept of the greatest possible protection of the interests that are legally protected by the Habitats Directive (decisions of 27 January 2000 loc. cit. p. 310 and of 17 May 2002 - BVerwG 4 A 28.01 - BVerwG decision 116, 254 <263>). These principles, developed for the assessment of alternatives, also apply to the assessment of imperative reasons of overriding public interest.*³⁷

In the event that a proposed development is authorised in accordance with Article 6(4) HD, then its realisation is not prohibited based on Article 6(2) HD.³⁸ However, according to the ECJ, paragraph 4 is not an exemption in relation to paragraph 2.³⁹ Adverse impacts and non-planned deteriorations that are not authorised in the impact and derogation assessments must be prevented by Member States and their authorities according to Article 6(2) HD,⁴⁰ which ensures the same level of protection as Article 6(3) HD.⁴¹ The prohibition of deterioration and disturbance also intervenes when the conditions for derogation have lapsed or the impact or derogation assessments were not undertaken in full and correctly.⁴²

³⁴ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 33 *et seq.*

³⁵ *cf.* ECJ, adjudication of 11.4.2013 – C-258/11, margin number 32-37.

³⁶ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10, margin number 114, 117; adjudication of 15.5.2014 – C-521/12 – Briels, margin number 35 *et seq.*; BVerwG, adjudication of 1.4.2015 – 4 C 6.14, margin number 28.

³⁷ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 15. similar to BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9; adjudication of 6.11.2013 – 9 A 14.12, margin number 79.

³⁸ ECJ, adjudication of 3.4.2014 – C-301/12, margin number 34; adjudication of 24.11.2011 – C-404/09, margin number 122 *et seq.*, 154 *et seq.*

³⁹ ECJ, adjudication of 11.4.2013 – C-258/11, margin number 32.

⁴⁰ *cf.* ECJ, adjudication of 24.11.2011 – C-404/09, margin number 122.

⁴¹ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 52; adjudication of 15.5.2014 – C-521/12, margin number 19

⁴² *cf.* ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68 *et seq.*; 74-78; adjudication of 7.9.2004 – C-127/02, margin number 37; final applications by Advocate-General Sharpston on ECJ, adjudication of 14.1.2016 – C-399/14, margin number 65 and by Advocate-General Kokott on ECJ, adjudication of 7.9.2004 – C-127/02, margin number 57.

The decision on the derogation is subject to full verification by the courts.⁴³ In this process, the timing of the decision for authorisation is critical to the legal evaluation.⁴⁴ Accredited conservation organisations are to be involved in the process and these organisations have the right to subject this decision to a court examination pursuant to Directive 2003/35/EC, Articles 6 and 11 of Directive 2011/92/EC and Articles 24 and 25 of Directive 2008/1/EC as the derogating authorisation is not enforced by law, but only by a corresponding decision taken by the authorities.⁴⁵

3. Imperative reasons of overriding public interest (IROPI)

A derogation is only permissible based on Article 6(4) subparagraph 1 HD if the proposed development is required due to imperative reasons of overriding public interest, including those of a social or economic nature. The public interest must significantly outweigh the conservation interests. This requires weighing up of the “imperative reasons of overriding public interest” against the equally public interest in the “integrity of the Natura 2000 site”.⁴⁶ In contrast to the usual specialist planning considerations between all competing concerns in the field, this weighing-up process is restricted to the two conflicting interests and must follow the specific legal provisions of the Habitats Directive. The basis for this is a bottom-up evaluation and weighing up of the two issues under consideration that is open to scrutiny and based on the individual circumstances of the case – differentiating between adverse impacts due to construction of the facility and the facility itself, as necessary.⁴⁷

Diverse public interests come into consideration as possible reasons.⁴⁸ However, the public motivation must be a fundamental cause that a project pursues, meaning that associated subsidiary purposes do not meet the requirements.⁴⁹ Purely private interests are not permissible. Based on the ECJ, developments proposed by private companies only fulfil the conditions stipulated in Article 6(4) HD, “where a project, although of a private character, in fact by its very nature and by its economic and social

⁴³ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 55-57; BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 110 *et seq.* and headnote 19.

⁴⁴ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 74; adjudication of 12.8.2009 – 9 A 64.07, margin number 52 with further references. cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 60 *et seq.*

⁴⁵ cf. BVerwG, adjudication of 1.4.2015 – 4 C 6.14, margin number 16–31 and headnote; adjudication of 18.12.2014 – 4 C 35.13, margin number 30, 53

⁴⁶ cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 36; adjudication of 16.2.2012 – C-182/10, margin number 75; adjudication of 11.9.2012 – C-43/10, margin number 114, 121.

⁴⁷ cf. ECJ, adjudication of 14.1.2016 – C-399/14, margin number 57; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 390; adjudication of 9.7.2009 – 4 C 12.07, margin number 13–17. Practical example e.g. VGH, Mannheim, decision of 24.3.2014 – 10 p 216/13.

⁴⁸ cf. ECJ, adjudication of 11.9.2012 – C-43/10, margin number 122.

⁴⁹ cf. BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 39.

context presents an overriding public interest and it has been shown that there are no alternative solutions.”⁵⁰

The ECJ has hereby taken action against solid private interests being disguised as for the common good. In exceptional cases, infrastructure for the establishment or expansion of a company may fulfil these conditions.⁵¹ The BVerwG recognises mainly airports that are operated in Germany by private companies.⁵²

Due to Article 6(4) HD it must be differentiated hereafter between sites with and without priority habitat types and species.

3.1 Sites without priority habitat types and species

According to the European Commission, “imperative reasons of overriding public interest” also include the fact that the proposed development proves “essential” to fulfilling weighty interests for the common good and that the authorities must provide evidence for its actual requirement.⁵³ Contrary to common practice even of the European Commission, this excludes only politically desirable proposed developments without any actual necessity for the common good, as well as less weighty public interests.⁵⁴ The ECJ arguments also run along these lines, even if they are less concrete.⁵⁵ The BVerwG in Germany is less strict on this point:

In this respect, based on settled case law, the presence of practical constraints that cannot be avoided by anybody is not required; Article 6(4) of the Habitats Directive simply presumes governmental handling that is guided by reason and a sense of responsibility, whereby, however, public interests that are of lesser importance are excluded, such as leisure-related needs in sites with priority species (decisions of 17 January 2007 - BVerwG 9 A 20.05 - BVerwG decisions (BVerwGE) 128, 1 margin number 129 and of 28 March 2013 BVerwG 9 A 22.11 margin number 99 with further references).⁵⁶

The proposed development must simultaneously be shown to be suitable to achieving the public aims without any reasonable doubt. The expectation that, for example, a motorway, navigable waterway or an expansion of an airport will increase the economic power of a region and reduce unemployment must therefore to be expected to a high degree based on recognised forecasting methods. Simple hope is therefore insufficient. If the BVerwG only makes the same demands as for the general justifica-

⁵⁰ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 77.

⁵¹ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 76.

⁵² BVerwG, decision of 3.6.2010 – 4 B 54.09.

⁵³ European Commission 2012a, p. 7, 9; Winter NuR 2010, 601, 604 *et seq.*

⁵⁴ see *McGillivray* Journal of Environmental Law 2012, 417 *et seq.*; *Clutten/Tafur* 2012, 167 *et seq.* See also the fundamental criticism of the usual weighting of economic and ecological public interests (*Bastmeijer* 2016, p. 387 (400 *et seq.*)).

⁵⁵ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10, margin number 121.

⁵⁶ BVerwG, decision of 6.11.2013 – 9 A 14.12, margin number 72. Similar to BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 389.

tion for planning submissions with regard to the accuracy of forecasting (are the facts completely ascertained and the prediction method correctly used),⁵⁷ then this will “essentially” do neither justice to the importance of Natura 2000 and the distribution of risk in relation to uncertainty laid down in Article 6(3) p 2 HD (where scientific doubt in relation to insignificance counts against the proposed development⁵⁸), nor to the legal requirement of “imperative reasons”. However, according to the BVerwG, based on the derogating nature of Article 6(4) HD, not all proposed developments that fulfil the requirements for the justification for planning submissions are given a special weighting “per se”.⁵⁹

A detailed justification is required in each case to establish what gives rise to significance in relation to weighting. Recognised criteria include:⁶⁰

- the European or constitutional weighting of the purpose being pursued (*cf.* Article 6(4) subparagraph 2 HD, Article 3(1)–(3) TEU, Article 11 TFEU),⁶¹
- the level of the actual or forecast requirement for the planned proposed development (e.g. traffic demand for a road or easing of traffic congestion in a town),⁶²
- the uncertainties in relation to forecasting that are associated with the proposed development,⁶³
- the urgency for the proposed development,⁶⁴

⁵⁷ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 17; decision of 14.4.2011 – 4 B 77.09, margin number 42–45.

⁵⁸ explicitly, ECJ, adjudication of 11.9.2012 – C-43/10, margin number 112. See also ECJ, adjudication of 14.1.2016 – C-399/14, margin number 43 f., 48 *et seq.*; adjudication of 15.5.2014 – C-521/12, margin number 20 *et seq.*; adjudication of 11.4.2013 – C-258/11 – Sweetman *et al.*, margin number 29–41; adjudication of 7.9.2004 – C-127/02, margin number 41–49, 56–59.

⁵⁹ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 391; adjudication of 9.7.2009 – 4 C 12.07, margin number 15 and headnote 2.

⁶⁰ *cf.* European Commission 2012a, p. 9.

⁶¹ *cf.* European Commission 2000. High weighting is therefore given to human health, public safety and conservation of the environment (e.g. reduction of CO₂ emissions (BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 76)).

⁶² BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 329 *et seq.* In contrast, a proposed development that first wishes to stimulate demand, for example, to promote economic development, has a lower weighting (BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 19), but may, correctly, actually not be necessary.

⁶³ ‘The greater the extent of the uncertainties, the lower the weighting of the public interest in the proposed development and the more concrete and binding the objectives in support of the proposed development must be if it is still to be allocated high weighting in spite of the uncertain demand.’ (BVerwG, decision of 22.6.2015 – 4 B 59.14, margin number 30. Similar BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 392; adjudication of 9.7.2009 – 4 C 12.07, margin number 17; decision of 14.4.2011 – 4 B 77.09, margin number 42–45).

⁶⁴ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 329.

- whether or not the aims pursued with the proposed development are prescribed by legally or politically, whereby statutory provisions carry greater weight,⁶⁵
- the level of substantiation for the aims and purposes that are given⁶⁶ and
- the long-term nature of a public purpose that is being pursued, whereby short-term purposes, e.g. in the case of an accident, may carry greater weight.

During the process of weighing up, it must be noted that the weight of the public interests that support the proposed development is reduced by other competing public interests. For example, this is the case when a motorway or coal-fired power station may well be desired for reasons of boosting the economy or supplying energy, but simultaneously contravenes European and national obligations on climate protection and emission control, or other sustainability objectives.⁶⁷

The BVerwG adjudicated as follows on the weight of interests in the integrity of the site:

*The weighting that is to be applied to interests in integrity in the weighing-up process is critically dependent on the extent of the adverse impacts (...). Both a qualitative and a quantitative evaluation of the adverse impact are required. A differentiated assessment is crucial, in which the importance of the Site of Community Importance to the Natura 2000 network must be considered on European, national and regional scales (...). Adverse impacts on a Site of Community Importance may be allocated variable weighting, for example, when there is only minor exceeding of the threshold of significance, if there is pressure due to the site having suffered previous damage, the proposed development only affects a relatively small portion of the site or only impacts on one area that is of low-level importance to the networking of the coherent system, Natura 2000. In addition to the extent of the adverse impact, other decisive factors include the importance of the habitats and species that are affected and their conservation status, the level of threat to the affected habitat type or species and the dynamics of their development (...). The appropriate assessment forms the basis for the evaluation. This provides information on the type and scope of significant impacts that have been determined and pressure on the site due to previous damage.*⁶⁸

According to the German Federal Administrative Court (BVerwG), the question remains open as to whether the intended compensatory measures for ensuring coherence

⁶⁵ for inclusion in planned requirements, such as the German Federal Transport Infrastructure Plan or the plan for the Trans-European Transport Network (e.g. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 70; adjudication of 8.1.2014 – 9 A 4.13, margin number 70; adjudication of 28.3.2013 – 9 A 22.11, margin number 102), for land-use planning (BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 70; adjudication of 9.7.2009 – 4 C 12.07, margin number 22).

⁶⁶ Lesser weighting is therefore allocated to the very general aim of ‘the economic development of a region’ (recognised, e.g. in BVerwG, adjudication of 6.11.2013 – 9 A 14.12 margin number 70; adjudication of 8.1.2014 – 9 A 4.13, margin number 70; adjudication of 28.3.2013 – 9 A 22.11, margin number 102)

⁶⁷ Annex II EU Commission Decision 406/2009; Annex I NEC Directive 2001/81/EC

⁶⁸ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 26. Similar, e.g. to BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 154, 164 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 99.

are to be considered to have a reducing effect when weighing up the effects of a proposed development.⁶⁹ Militating against this is the fact that compensatory measures are not considered in the appropriate assessment.⁷⁰ These measures are designed to conserve the coherence of the Natura 2000 network and not the integrity of the affected site⁷¹ and they also constitute an independent condition in the decision on the derogation in line with Article 6(4) subparagraph 1 HD. Conversely, previous damage in the site may decrease the extent of the adverse impact of a project or plan and thereby reduce the weighting for the interests in integrity.⁷²

To date, the overriding imperative reasons that have been recognised in case law include: drinking water supplies and agricultural irrigation;⁷³ transport demands, in particular in cases where a statutory demand has been determined and a road forms part of the trans-European network, as well as in cases of easing of congestion;⁷⁴ interests in relation to national defence, including the exercises required for this, also in the case of priority natural habitat types or species⁷⁵; protection from noise pollution;⁷⁶ expansion of an airport into an intercontinental airport, if the forecasts support the demand.⁷⁷ The allocation of overriding weight in cases of infrastructure for private administrative centres has been rejected;⁷⁸ as is the case for exclusively defined objectives in spatial planning;⁷⁹ and for the objectives of decentralising transport by air and strengthening the competitiveness of regions where a new airport could be situated.⁸⁰

3.2. Sites with priority habitat types and species

Article 6(4) subparagraph 2 HD exacts higher demands of weighting for “imperative reasons of public interest” if priority natural habitat types or priority species occur at the site, which must be given higher levels of protection. Priority habitat types and species are only designated (with an “*”) in Annexes I and II of the Habitats Directive

⁶⁹ cf. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 100; adjudication of 6.11.2013 – 9 A 14.12, margin number 71; adjudication of 23.4.2014 – 9 A 25.12, margin number 77. Affirmative BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 407; adjudication of 9.7.2009 – 4 C 12.07, margin number 28–30; decision of 3.6.2010 – 4 B 54.09, margin number 21, if they also make a reasonable contribution towards the integrity of the affected site.

⁷⁰ cf. ECJ, adjudication of 15.5.2014 – C-521/12 – Briels, margin number 28–33.

⁷¹ cf. BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 27.

⁷² cf. BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 31.

⁷³ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 122.

⁷⁴ e.g. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 69 *et seq.*; adjudication of 23.4.2014 – 9 A 25.12, margin number 74 *et seq.*

⁷⁵ BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 19

⁷⁶ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 86.

⁷⁷ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 17 *et seq.*, 23.

⁷⁸ ECJ, adjudication of 16.2.2012 – C-182/10, margin number 78.

⁷⁹ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 22.

⁸⁰ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 19.

and not in the Birds Directive, meaning that no priority birds exist. Derogations can therefore not be justified for these sites in every case that is in the public interest.⁸¹ However, according to the European Commission,⁸² the BVerwG⁸³ and parts of the German literature,⁸⁴ Article 6(4) subparagraph 2 HD does not apply in cases where priority habitat types or species are present, but will definitely not be adversely affected.

Article 6(4) subparagraph 2 HD limits the reasons to public interests that are associated with human health and public safety or have beneficial consequences of primary importance for the environment. These public interests are also of overriding importance based on European agreements and German Constitutional Law (*cf.* Articles 11, 45(3), 52(1), 114(3) TFEU). Nevertheless, in spite of these cases being mentioned specifically, assessment of an individual case cannot be dispensed with as approval of the proposed development is still dependent on its weighting and requirement on a case by case basis.⁸⁵ All other reasons of public interest can only be considered if the responsible authority has obtained an opinion from the Commission.

Based on the higher level of protection demanded in these cases, both the other reasons and the three stated interests are to be narrowly defined.⁸⁶ For example, safeguarding of the drinking water supply is related to the protection of human health according to the ECJ, but this does not pertain to agricultural irrigation.⁸⁷ Measures associated with protection from epidemics, catastrophes, emergency services and flooding are also to be regarded as justifiable.⁸⁸ Public safety comprises the protection and defence of the civilian population, including military training areas and exercises.⁸⁹ The BVerwG states that a motorway may also be justified for reasons of protecting human health and public safety if it results in a significant reduction in traffic on A-roads passing through built-up areas as the population is then better protected from nitric oxide and road safety is increased.⁹⁰ It must be noted with reference to the beneficial consequences of primary importance for the environment that not every proposed development with positive effects on the environment justifies derogations, especially

⁸¹ *cf.* ECJ, adjudication of 14.4.2005 – C-441/03, margin number 27.

⁸² European Commission 2000, p. 53; European Commission 2012a, p. 25.

⁸³ BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 8 *et seq.*; adjudication of 12.3.2008 – 9 A 3.06, margin number 152. In contrast, BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 34.

⁸⁴ *Ewer*, in: Lütke/Ewer, BNatSchG, 2011, § 34 margin number 65; *Meßerschmidt* 2014, § 34 margin number 197 *et seq.*

⁸⁵ *cf.* BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 37–40.

⁸⁶ *cf.* ECJ, adjudication of 11.9.2012 – C-43/10, margin number 123-128; BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 36.

⁸⁷ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 126.

⁸⁸ *cf.* ECJ, adjudication of 28.2.1991 – C-57/89, margin number 8; BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 37.

⁸⁹ *cf.* BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 1 *et seq.*, 19.

⁹⁰ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 66 *et seq.*

when it does not necessarily have to be located in or in the vicinity of a Natura 2000 site if other locations or options are available (e.g. renewable energy plants).⁹¹

An opinion from the European Commission is to be obtained before a decision on the derogation is taken if none of the specifically mentioned reasons favour a proposed development. This procedural involvement serves the purpose of ensuring special protection of priority habitats and species and should put the Commission in the position to undertake its own evaluation of the potential adverse effects. According to the BVerwG, it must therefore be provided with comprehensive information.⁹² Nevertheless, according to the BVerwG, the opinion issued by the Commission, whether it is positive or negative in relation to the proposed development, is not binding for the authorising body, which is why there is also no requirement for a court assessment of its veracity according to the BVerwG.⁹³ This does, indeed, agree with the wording in Article 6(4) subparagraph 2 HD. Nonetheless, the meaning and purpose of the opinion would be defeated if the authorising body were permitted to simply overrule in cases of a negative opinion. After all, the European Commission is the guardian of the Natura 2000 network and thus fulfils a special function (*cf.* Article 4(2), (9) and (17) HD).⁹⁴ The opinion should also prevent authorisations of proposed developments that do not comply with European Law only subsequently being revoked by infringement proceedings in accordance with Article 258 TFEU, while priority habitat types and species in the relevant site may already have incurred negative effects and possibly even irreversible consequences. An opinion that rejects the proposed development may therefore only be overruled in cases of a clear error of judgement by the Commission. However, up to now, the European Commission only exerts little control through its mainly authorising opinions.⁹⁵

In the presence of a positive opinion or an erroneous rejection, reasons of public interest within the meaning of Article 6(4) subparagraph 1 HD may also justify interventions in the interests of the integrity of the Natura 2000 site.⁹⁶ However, based on the BVerwG, higher demands are to be made on the weighting of the reasons in such cases:

The protective system classifies its priority elements as in need of greater protection than non-priority elements (cf. ...). From the perspective of proportionality, this results in 'only a limited number of such imperative reasons' appearing suitable for justifying an adverse impact on priority habitat types or species (cf. ECJ, decision of 14 April 2005 – adjudication C-441/03 – Summary of Decisions 2005, I-3043 margin number 27). Public interests, that can surface in a variety of guises, that are of lesser importance are thus excluded a priori (e.g. leisure-related needs of the population; see ECJ, decision of 28 February 1991 – adjudication C-57/89 – Summary of Decisions 1991, I-883 margin number 22). Imperative

⁹¹ *cf.* Schumacher/Schumacher, in: Schumacher/Fischer-Hüftle, BNatSchG, 2011, § 34 margin number 99; Gellermann, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 46.

⁹² BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 87.

⁹³ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 87.

⁹⁴ *cf.* European Commission 2012a, p. 27.

⁹⁵ critical e.g. McGillivray 2015, p. 101 (109 *et seq.*) and Krämer Journal of Environmental Law 2009, 59.

⁹⁶ on recognition practice European Commission 2012a, p. 9 *et seq.*

*reasons of overriding public interest must generally at least fulfil the strict demands of common good given in Article 14(3) first sentence of German Constitutional Law (cf. decision of 16 March 2006 – BVerwG 4 A 1075.04 – BVerwG decision (BVerwGE) 125, 116 margin number 566 on Article 16(1) character c) of the Habitats Directive). In addition, in order to achieve the level required by Article 6(4) subparagraph 2 of the Habitats Directive, similarly weighty interests in the common good must be pursued through the proposed development, as have been explicitly mentioned as examples by the Council in Article 6(4) subparagraph 2 of the Habitats Directive (decision of 17 January 2007 loc. cit. margin number 129; Hösch, German Environmental and Planning Law (UPR) 2010, 7 <8 et seq.>; more closely probably Frenz, UPR 2011, 100 <103> and Günes/Fisahn, EurUP 2007, 220 <227>).*⁹⁷

4. Assessment of alternative solutions

No alternative solutions are permitted to exist based on Article 6(4) subparagraph 1 HD and evidence for this must be provided according to the ECJ.⁹⁸ Based on the specific protection of integrity in Natura 2000 sites, this assessment of alternatives cannot be compared with assessments of alternatives, for example, in the strategic environmental impact assessment due to Articles 5(1) and 9(1) character b) of the Directive 2001/42/EEC on the Strategic Environmental Assessment.⁹⁹ Rather more, it contains an avoidance rule that must be strictly adhered to (see 2).

The question arises as to what a notable alternative can be. The Habitats Directive remains silent on this. In Germany, the legislature has therefore defined an alternative more closely in § 34(3) no. 2 of the Federal Nature Conservation Act, in the sense that it must be reasonable and the purpose that is being pursued by the project can hereby be achieved in a different location, with or without a lower adverse impact. This definition was further embellished by the BVerwG:

If the objective of the project can be realised in a location that is more favourable based on the conservation concept of the Habitats Directive or the intensity of the intervention can be reduced, then the project proponent must make use of this option. The developer shall not be granted any room for manoeuvre of any kind. In contrast to the specialist planning assessment of alternatives, the Habitats Directive statutory assessment of alternatives does not form part of a planning consideration. The authority is granted no scope for judgement in relation to the comparison of the alternatives. [...] The requirements for the exclusion of alternatives increase progressively in relation to how suitable they are to the realisation of the aims of the proposed development, without leading to obvious - without reasonable doubt - disproportionate adverse impacts. What is therefore decisive in this matter is

⁹⁷ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 73.

⁹⁸ ECJ, adjudication of 26.10.2006 – C-239/04, margin number 36.

⁹⁹ cf. BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 15; decision of 3.6.2010 – 4 B 54.09, margin number 9.

*whether imperative reasons of overriding public interest demand the realisation of exactly this alternative, or whether these reasons can also be fulfilled with a different alternative (final applications by the Advocate-General Kokott on adjudication C-239/04 – summary decisions 2006, I-10183 margin number 43, 46).*¹⁰⁰

The responsible authority is also under the obligation to fully assess the alternatives on its own motion and is not permitted, for example, to limit this assessment to the alternatives considered by the developer without conducting its own assessment, as the Natura 2000 impact assessment, overall, is an official assessment and authorisation procedure.¹⁰¹

However, settled BVerwG jurisdiction imposes four restrictions on what are essentially strict standards for assessment:

1. the alternative must not result in a different project,
2. it must be realisable and proportionate,
3. it shall not have a significant adverse impact on public interests and
4. it must be more advantageous to the Natura 2000 network.¹⁰²

The high levels of protection of the integrity of Natura 2000 sites and the coherence of the network that demand the greatest possible levels of care are to be considered with reference to the scope of these four conditions. Therefore, only weighty reasons can justify the exclusion of an alternative solution.¹⁰³

In the case of proposed linear developments (e.g. roads, railways), the search for alternatives must not be limited solely to the planning corridor, i.e. the course of the route most suited to the aims of the proposed development from a transport perspective.¹⁰⁴ This can, for example, be carried out based on a broad environmental impact assessment that is composed of a spatial sensitivity analysis and a comparison of variants.¹⁰⁵ In this process, according to the BVerwG, a summary appraisal of the potential for adverse impacts is sufficient for routes outside the planning corridor.¹⁰⁶ Even in the

¹⁰⁰ BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9. Settled case law, e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 410; adjudication of 6.11.2013 – 9 A 14.12, margin number 74; adjudication of 12.3.2008 – 9 A 3.06, margin number 170; adjudication of 17.5.2002 – A 28.01, BVerwGE 116, p. 254 (262). Exception in the case of national defence (BVerwG, adjudication of 10.4.2013 – 4 C 3.12, margin number 19).

¹⁰¹ cf. ECJ, adjudication of 26.10.2006 – C-239/04, margin number 36–40.

¹⁰² settled case law, e.g. BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 74 *et seq.*; adjudication of 23.4.2014 – 9 A 25.12, margin number 78; adjudication of 6.11.2012 – 9 A 17.11, margin number 70.

¹⁰³ cf. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 105.

¹⁰⁴ cf. ECJ, adjudication of 26.10.2006 – C-239/04, margin number 36–40; BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 15; adjudication of 6.11.2013 – 9 A 14.12, margin number 75.

¹⁰⁵ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 88.

¹⁰⁶ BVerwG, decision of 28.11.2013 – 9 B 14.13, margin number 15; adjudication of 6.11.2013 – 9 A 14.12, margin number 75.

case of proposed developments with a fixed location (e.g. airports), an assessment must be carried out on whether a different location offers an alternative solution.¹⁰⁷

4.1. No other project

In detail, the BVerwG states:

*However, only those changes shall be regarded as an alternative that do not touch upon the identity of the proposed development. An alternative can no longer be referred to as such in cases where this results in a different project, where the aims pursued in a permissible manner by the developer can no longer be realised. An expectation of curtailment to the degree of fulfilment of these aims is the only reasonable option. In contrast, a planning variant does not need to be considered if it cannot be realised without giving up independent partial aims that are being pursued through the proposed development (...).*¹⁰⁸

An alternative that results in a different project is therefore not an alternative that needs to be considered. In the prevailing view in Germany this shall apply, in particular, to system or concept alternatives and abandonment (so-called zero-option).¹⁰⁹ According to the BVerwG, alternatives that are associated with material compromises in relation to the degree of fulfilment of the aims are dismissed, whereby this depends on the individual case as the boundaries are fluid.¹¹⁰

But the subjective notions of the developer and the proponent's weighting of different partial aims are not relevant to the question of when a different project is present.¹¹¹ This also applies to proposed developments with a fixed location, such as airports and seaports.¹¹² What are decisive are the imperative reasons of public interest

¹⁰⁷ BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9.

¹⁰⁸ BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9. Settled case law, e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 410; adjudication of 6.11.2012 – 9 A 17.11, margin number 70; adjudication of 17.1.2007 – 9 A 20.05, margin number 143.

¹⁰⁹ so e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 418 *et seq.*; Gellermann, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 36; Mühlbauer, in: Lorz et al., Naturschutzrecht, 2013, § 34 BNatSchG margin number 22. Other opinion European Commission 2012b, p. 7, 9.

¹¹⁰ e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 414 *et seq.* For example, for the BVerwG, an A-road is no longer an alternative to an intercity motorway (BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 73), which is not a convincing argument, given the potential for standards of construction with four lanes and no crossings that are also possible for A-roads.

¹¹¹ Winter NuR 2010, 601 (605). *cf.* BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 411, but restricting to public aims named by the developer; BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 78 *et seq.* in relation to the question of whether an urban motorway actually constitutes a different project to an intercity motorway; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 80 in relation to bypasses with three to four lanes instead of a motorway; BVerwG, adjudication of 9.7.2009 – 4 C 12.07, margin number 34 *et seq.* in relation to short-haul airports instead of intercontinental airports.

¹¹² BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9 f.; Winter NuR 2010, 601 (606).

that favour the proposed development and their weight,¹¹³ whereby political aims carry less weight than statutory aims.¹¹⁴ In this respect, system alternatives - for example use of railway lines instead of constructing or expanding a road or dredging a river - should not be summarily excluded if the public interests that are being pursued (e.g. transport of people and goods between A and B) can be realised in a reasonable manner, without huge compromises, and significant adverse impacts on Natura 2000 sites can be avoided.¹¹⁵ After all, in that case, a realisation of the proposed development in spite of adverse impacts on the site would certainly not constitute rational and responsible governmental handling and would not be “imperative” within the meaning of the BVerwG decisions presented in 4.1. Because of these reasons and contrary to the opinion of the BVerwG¹¹⁶ the developer cannot restrict the public interests, which are to be taken as IROPI for the justification of a derogation and as the basis for the assessment of alternatives solutions in Article 6(4) HD.

Furthermore, compromises in relation to the degree of fulfilment of the aims are insignificant if the partial aims excluded in an alternative do not serve overriding public interests or only serve private interests in situations with mixed interests (e.g. airports). In cases where the proposed development will actually affect priority habitat types or species, non-realizable partial aims must serve the overriding important public interests given in Article 6(4) subparagraph 2 HD (see 3.2).

4.2. Realisable and not disproportionate

Alternatives that are not possible for statutory or actual reasons, or where the likelihood of realisation is highly uncertain, are purely theoretical alternatives and not admissible.¹¹⁷ This can be the case, in particular for proposed developments with little flexibility in relation to their fixed location. However, certain difficulties do not exclude alternatives a priori.¹¹⁸

Furthermore, according to the BVerwG, alternatives that are associated with disproportionate costs are also excluded based on the principle of proportionality in Article 5(4) TEU:

¹¹³ BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 9; Advocate-General *Kokott* in ECJ, adjudication of 26.10.2006 – C-239/04, margin number 46; *Winter* NuR 2010, 601 (605). Different BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 412.

¹¹⁴ cf. ECJ, adjudication of 15.5.2014 – C-521/12 – *Briels*, margin number 36; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 411; adjudication of 28.3.2013 – 9 A 22.11, margin number 99, 111.

¹¹⁵ cf. Advocate-General *Kokott* in ECJ, adjudication of 26.10.2006 – C-239/04, margin number 43; *Winter* NuR 2010, 601, 605.

¹¹⁶ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 411 *et seq.*

¹¹⁷ cf. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 105; decision of 3.6.2010 – 4 B 54.09, margin number 6, 10; adjudication of 9.7.2009 – 4 C 12.07, margin number 16 and 33.

¹¹⁸ cf. ECJ, adjudication of 26.10.2006 – C-239/04, margin number 38.

*The reasonable level of attempts at avoidance must not exceed any sensible relation to the gains that can thereby be achieved for nature and the environment. In this context, financial considerations may tip the balance. Whether the costs are disproportionate to the protective system laid down in accordance with Article 6 of the Habitats Directive shall, as always, be weighed up against the shared protected natural resources that are adversely affected. The guiding principle for this is provided by the severity of the adverse impact on the site, the number and importance of any habitat types or species that may be affected and the degree of incompatibility with the conservation aims.*¹¹⁹

However, based on a recent ECJ decision, arguments relating to costs are essentially less important than the interests in integrity:

*In consideration of the narrow interpretation of Article 6(4) of this Directive, which was referred to in margin number 73 of the above decision, the selection of alternative solutions shall therefore be prohibited from being based solely on the economic costs of such measures.*¹²⁰

In the disproportionate financial question, the financial power of the developer must therefore not be considered, something that is also often difficult to determine in the not uncommon case where the government is the proponent (e.g. road and rail construction) and might well be achieved in exceptional cases. Furthermore, the comparison must also not simply focus on the construction and maintenance costs of the project and the alternative. However, in some of its decisions, the BVerwG has approved the exclusion of alternatives due to higher construction costs, without the provision of any further justification or weighing-up.¹²¹ The question of the level at which additional costs become disproportionate in either relative or absolute terms cannot be answered without making a comparison with the nature conservation gains made through an alternative in each individual case. According to the ECJ, even the demolition of a prematurely built installation is essentially not an alternative that is to be excluded.¹²² According to the BVerwG, the work and time involved for a new approval or planning approval procedure also poses no obstacle.¹²³

Quite rightly, the BVerwG stipulates that disproportionality must be assessed in relation to the achievable protection of the Natura 2000 network. However, this cost-benefit analysis also raises questions that are very difficult to answer as costs must be compared with non-monetary values in such cases. The Natura 2000 sites and their natural resources have no monetary value, rather more; only potential estimates can be made of their “cash” value.¹²⁴ It must be noted in this process that the protected habitat types and species are not only being protected for their own sake. On the

¹¹⁹ BVerwG, adjudication of 27.1.2000 – 4 C 2.99, JURIS, margin number 31. Confirming, e.g. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 105; adjudication of 6.11.2012 – 9 A 17.11, margin number 70.

¹²⁰ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 77.

¹²¹ BVerwG, adjudication of 17.1.2007 – 9 A 20.05, margin number 142; adjudication of 28.3.2013 – 9 A 22.11, margin number 110.

¹²² ECJ, adjudication of 14.1.2016 – C-399/14, margin number 68–75.

¹²³ BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 7.

¹²⁴ European Commission 2013b.

contrary, these habitat types and species and the Natura 2000 site in question, as well as the entire network, provide society with diverse ecosystem services,¹²⁵ for example, water purification and storage, carbon sequestration, an ecological balance between beneficial species and pests, or recreation in nature. This complex monetary assessment can generally not be carried out within the scope of an authorisation procedure as it requires comprehensive investigations and surveys.¹²⁶ The outcome would also only provide a relatively coarse estimate of its worth that was associated with uncertainty.

Given the difficulties associated with determining disproportionality, the exclusion of an alternative solely due to disproportionate costs should only be possible in rare, very clear cases, whereby further reasons should also militate against the alternative.¹²⁷

4.3. No significant adverse impact on other public interests

According to the general weighting of the conservation interest in conjunction with other interests in Article 6(4) HD, the BVerwG excludes any alternatives that, contrary to the planned development, have a significant adverse impact on other public interests.¹²⁸ However, this far-reaching proviso must be limited due to the high level of protection of integrity in Natura 2000 sites. Not every public interest outweighs the interest in the protection of integrity - even in cases of a significant adverse impact. Rather, imperative reasons of overriding public interest must also be used as the sole basis in such cases (see 3.1). These imperative reasons manifest mainly in statutory regulations on protection or targets. Alternatives are therefore eliminated, in particular, when they would have a significant adverse impact on the interests listed in Article 6(4) subparagraph 2 HD - protection of human health, public safety and environmental protection. In contrast, other public interests that are not committed to statutes or general standards, such as promotion of the regional economy and improved transport links,¹²⁹ leisure-related needs¹³⁰ or purely transport-technical arguments,¹³¹ do not limit the assessment of alternatives on principle. According to the BVerwG, the latter shall also apply to the site-independent conservation of species within the meaning of Articles 12-16 HD and Articles 5-9 BD, as the protection of a site constitutes the more specific protective system.¹³²

¹²⁵ cf. Millenium Ecosystem Assessment 2005.

¹²⁶ cf. TEEB 2011.

¹²⁷ cf. BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 85.

¹²⁸ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 78; adjudication of 6.11.2013 – 9 A 14.12, margin number 74, 80; adjudication of 28.3.2013 – 9 A 22.11, margin number 105.

¹²⁹ cf. BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 84; adjudication of 28.3.2013 – 9 A 22.11, margin number 102, 109, however, with this being allocated greater weighting.

¹³⁰ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 72.

¹³¹ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 90.

¹³² BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 80.

4.4. More advantageous to the Natura 2000 network

The alternatives that are to be considered must be more advantageous to both the affected site and to the entire Natura 2000 network. This is the case if an alternative would not have a significant adverse impact on any of the Natura 2000 sites. If other Natura 2000 sites are also affected, then after the BVerwG an alternative is only more favourable if there are no adverse impacts on priority habitat types or species in these sites:

*In the event that the solution issued with planning approval and a planning alternative both have an effect on Sites of Community Importance, then a coarse analysis shall be carried out and the decision shall be made solely on the basis of the severity of the adverse impact, based on the characteristics used for differentiation laid down in Article 6 of the Habitats Directive. The investigation shall therefore only focus on whether there is an adverse impact on habitat types in Annex I or on animal species in Annex II of the Habitats Directive and whether the habitat types that are adversely affected are classified as priority or non-priority. In contrast, the criteria for more detailed differentiation that must be noted when registering a site (Article 4(1) subparagraph 1 first sentence Habitats Directive in association with Annex III phase 1) shall not be considered in the comparison of routes; a differentiation within the stated groups based on the value and number of affected habitat types or species and the given intensity of the impact shall therefore not be repeated within the stated groups (...).*¹³³

In other words, the BVerwG states that an alternative is eliminated if priority or only non-priority natural resources are affected in the proposed variant and in the alternative solution.¹³⁴ In such cases, based on the court, the decision rests with the planning assessment and the authority is granted some scope within the assessment, in contrast to the statements cited above.¹³⁵

This generalising coarse differentiation that does not consider the differences in severity of the adverse impacts on sites cannot be viewed as in compliance with the Directive.¹³⁶ A proposed development can have a highly variable impact on a Natura 2000 site, depending on its type, extent and duration, previous pressures on the site and the cumulative effects of other proposed developments, as well as the condition of the habitat types and species that are under protection. The following examples are highlighted:

¹³³ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 75. Settled case law, e.g. BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 105; adjudication of 12.3.2008 – 9 A 3.06, margin number 170 *et seq.*

¹³⁴ *cf.* BVerwG, adjudication of 8.1.2014 – 9 A 4.13, margin number 72; adjudication of 6.11.2013 – 9 A 14.12, margin number 87; adjudication of 28.3.2013 – 9 A 22.11, margin number 107.

¹³⁵ BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 84, 86; decision of 9.12.2011 – 9 B 44.11, margin number 7.

¹³⁶ similar to *Gellermann*, in: Landmann/Rohmer, Umweltrecht, 2016, § 34 BNatSchG margin number 37.

- loss of land in the site due to construction works and installations, resulting in the destruction of, or adverse impacts on, types of habitat and habitats and territories occupied by some species,¹³⁷
- effects of cutting through the site or barriers within the site as well as in relation to habitats or populations outside the site, especially in the case of roads, railway lines and waterways, but also e.g. in the case of larger scale wind power plants or opencast mining,¹³⁸
- risk of collisions due to, for example, the operation of roads and railways or wind energy systems,¹³⁹
- changes to the water balance in the landscape through, for example, a reduction in the groundwater level or changes to/diversions of water bodies to make space for, e.g. roads or railways, mines, energy production, drinking water production or agriculture,¹⁴⁰
- emission of noise, vibration, light and compounds within or into the site from the outside, such as nitrogen emissions from roads, power plants or agricultural land or chloride emissions from roads due to winter salting.¹⁴¹

¹³⁷ cf. only ECJ, adjudication of 11.4.2013 – C-258/11, margin number 37 *et seq.*; adjudication of 24.11.2011 – C-404/09, margin number 97 *et seq.*; adjudication of 14.1.2016 – C-141/14, margin number 63 *et seq.*; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 67 *et seq.*, 71 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 71 *et seq.*

¹³⁸ ECJ, adjudication of 20.5.2010 – C-308/08, margin number 25; adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; adjudication of 14.1.2016 – C-141/14, margin number 59, 75; BVerwG, decision of 23.1.2015 – 7 VR 6.14, margin number 16, 27; adjudication of 14.7.2011 – 9 A 12.10, margin number 93; adjudication of 14.4.2010 – 9 A 5.08, margin number 33.

¹³⁹ ECJ, adjudication of 20.5.2010 – C-308/08, margin number 37–52; BVerwG, decision of 23.1.2015 – 7 VR 6.14, margin number 27; decision of 7.2.2011 – 4 B 48.10, margin number 6.

¹⁴⁰ ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23; adjudication of 13.12.2007 – C-418/04, margin number 256 *et seq.*; BVerwG, adjudication of 12.3.2008 – 9 A 3.06, margin number 97 *et seq.*

¹⁴¹ Nitrogen: ECJ, adjudication of 15.5.2014 – C-521/12, margin number 12, 23, adjudication of 11.9.2012 – C-43/10, margin number 98 *et seq.*; BVerwG, decision of 5.9.2012 – 7 B 24.12, margin number 7 *et seq.*; adjudication of 23.4.2014 – 9 A 25.12, margin number 26 *et seq.*, 45 *et seq.*; adjudication of 29.9.2011 – 7 C 21.09, margin number 41; adjudication of 14.4.2010 – 9 A 5.08, margin number 87; decision of 26.11.2007 – 4 BN 46.07, margin number 11; adjudication of 12.3.2008 – 9 A 3.06, margin number 107 *et seq.*; adjudication of 17.1.2007 – 9 A 20.05, margin number 101 *et seq.* Chloride: BVerwG, adjudication of 3.5.2013 – 9 A 16.12, margin number 36 *et seq.*; adjudication of 14.7.2011 – 9 A 12.10, margin number 78. Noise/vibration: ECJ, adjudication of 24.11.2011 – C-404/09, margin number 146 *et seq.*, 166 *et seq.*; BVerwG, adjudication of 18.12.2014 – 4 C 35.13, margin number 34, 43 *et seq.*; adjudication of 28.3.2013 – 9 A 22.11, margin number 84, 88 *et seq.*; adjudication of 6.11.2012 – 9 A 17.11, margin number 45; adjudication of 23.4.2014 – 9 A 25.12, margin number 51. Light/optical disturbance: BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 74–76; adjudication of 23.4.2014 – 9 A 25.12, margin number 51.

Article 6(4) subparagraph 1 HD gives no indication that the differentiated assessment of the effects of a proposed development as stipulated in Article 6(3) HD is now to be irrelevant to the examination of alternatives.¹⁴² The latter point would also contravene settled case law,¹⁴³ whereby a full appropriate assessment is an indispensable condition for a derogating authorisation. The ECJ has now expressly emphasised that neither potential deterioration and disturbance, nor possible advantages that may arise from them, can be disregarded during the search for an alternative.¹⁴⁴ It follows from the meaning and purpose of the appropriate assessment overall, and from the nature of the derogation assessment as an exception provision, that significant impacts on Natura 2000 sites and on the coherence of the network must be kept as low as is possible. The BVerwG refers to this as “the concept of the greatest possible level of care” (see 2). The resultant obligatory instruction for a careful investigation in individual cases¹⁴⁵ must also apply to the derogation assessment.¹⁴⁶ Purely practical reasons, such as the avoidance of further appropriate assessments, do not justify a watering down of the strict protection of integrity, so long as the scope of the assessment for alternatives does not reach the threshold of disproportionality. This is hardly likely to apply to purely procedural costs.¹⁴⁷ Furthermore, alternatives do not need to be investigated in depth for their Natura 2000 compatibility if they have already been eliminated for the other reasons given above or the results of their screening already indicate that severe adverse impacts are to be expected. On principle, the result must therefore also provide a full comparison of the severity of the adverse impacts on Natura 2000 sites during the assessment of alternatives.¹⁴⁸

5. Compensatory measures

Pursuant to Article 6(4) subparagraph 1 HD, all necessary compensatory measures are to be taken to ensure that the global coherence of Natura 2000 is protected. European law on the conservation of natural habitats is designed to achieve a good conservation status for the selected species and habitat types in their natural areas of distribution

¹⁴² In contrast, in the case of an alternative being financially disproportionate, the BVerwG recognises ‘the severity of the adverse impact on the site, the number and importance of any habitat types or species that may be affected and the degree of incompatibility with the conservation aims’ as criteria for assessment (BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 105). Probably similar to the necessity for demolishing a proposed development built prematurely (BVerwG, decision of 6.3.2014 – 9 C 6.12, margin number 47).

¹⁴³ see footnote 29.

¹⁴⁴ ECJ, adjudication of 14.1.2016 – C-399/14, margin number 74.

¹⁴⁵ cf. only ECJ, adjudication of 15.5.2014 – C-521/12, margin number 27.

¹⁴⁶ as stated in BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 79. cf. *Winter NuR* 2010, 601 (603 *et sqq.*).

¹⁴⁷ cf. BVerwG, decision of 3.6.2010 – 4 B 54.09, margin number 7.

¹⁴⁸ cf. ECJ, adjudication of 11.9.2012 – C-43/10, margin number 114; European Commission 2012a, p. 7.

across the entire European Union. In this process, the Natura 2000 sites are important keystones for the green infrastructure that is to be expanded in the EU.¹⁴⁹ These sites are designed to represent the species and habitat types that are to be conserved at an adequate level and also to safeguard migration within the European Community.¹⁵⁰ Migration between sites is an essential prerequisite for guaranteeing healthy populations in the long term and allowing shifts in the natural areas of distribution in times of climate change. Taken together, representative status and migration constitute the most important functions of a coherent European ecological network of special protected areas, as demanded by Article 3(1) HD.

In accordance with Article 6(4) subparagraph 1 HD, the safeguarding of this coherence constitutes a condition for authorisation and is not simply a legal consequence.¹⁵¹ The costs are essentially to be borne by the developer, whereby government subsidies are possible.¹⁵² The specifications for the selection of sites based on Article 4(1) and (2) HD also serve as the benchmark in such cases.¹⁵³ This requires the identification of all adverse impacts associated with the proposed development.¹⁵⁴ Compensatory measures can be implemented in the affected Natura 2000 site, in a different Natura 2000 site or outside and can also involve the creating of new habitats, if the measures take place in the same biogeographical region.¹⁵⁵ Strictly in line with the commission guidance documents, the BVerwG demands the following with reference to content:¹⁵⁶

The organisation of the compensatory measures to ensure the coherence shall be functionally tailored to dealing with the specific adverse impact that triggered the requirement for such measures. This process shall document the affected habitats and species in comparable dimensions, refer to the same biogeographical region in the same Member State and plan functions that are comparable to those based on which the original site was selected (...). Measures include the restoration or improvement of the remaining habitat or the new creation of habitat that is to be incorporated into the Natura 2000 network (...). Compensatory measures to safeguard coherence do not necessarily have to be implemented in the

¹⁴⁹ European Commission 2013a, p. 10.

¹⁵⁰ Kettunen et al. 2007, p. 38 et seq.

¹⁵¹ cf. ECJ, adjudication of 11.9.2012 – C-43/10, margin number 114, 119, 130–133, 128; adjudication of 15.5.2014 – C-521/12 – Briels, margin number 34; adjudication of 26.10.2006 – C-239/04, margin number 34 f.; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 418; adjudication of 17.1.2007 – 9 A 20.05, margin number 148 and headnote 22.

¹⁵² European Commission 2012a, p. 23.

¹⁵³ European Commission 2012a, p. 13 et seq.

¹⁵⁴ ECJ, adjudication of 11.9.2012 – C-43/10, margin number 144, 130 et seq.; adjudication of 24.11.2011 – C-404/09, margin number 109; BVerwG, adjudication of 23.4.2014 – 9 A 25.12, margin number 88.

¹⁵⁵ cf. ECJ, adjudication of 15.5.2014 – C-521/12, margin number 38; European Commission 2012a, p. 14; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 418–422, adjudication of 12.3.2008 – 9 A 3.06, margin number 199; adjudication of 6.11.2012 – 9 A 17.11, margin number 85 et seq.; Ureta JEEPL 2007, 84 (89, 96); to the Swedish practise see Persson/Larsson/Villarroya *Nature Conservation* 2015, 113 et seq.

¹⁵⁶ European Commission 2000, p. 49 et seq.; European Commission 2012a, p. 11 et seq.

*immediate vicinity of the adverse impact; rather more, the replacement of the loss that the site will suffer in relation to its function for the biogeographical distribution of the affected habitats and species is sufficient (...).*¹⁵⁷

From a temporal perspective and different to mitigation measures in the appropriate assessment, the implementation of compensatory measures is generally sufficient if left until the proposed development is realised - even if the functional losses are only compensated for in the long term - so long as this does not result in the threat of irreversible damage.¹⁵⁸ However, depending on the type of adverse impact and the compensatory measures that are planned, it may also be advisable to introduce or render effective the required measures based on function prior to the start of the project.¹⁵⁹

The assessment of whether or not a measure is suitable must be based exclusively on specialist conservation standards, whereby, in this case – unlike for mitigation measures – a high probability of effectiveness based on the current state of scientific knowledge¹⁶⁰ is sufficient.¹⁶¹ The authority undertaking the examination grants the BVerwG scope for judgement in the selection of measures.¹⁶²

However, compensatory measures cannot in principle already be required by other statutory obligations without the proposed development, due to in this case there will be no supplementary compensation of the adverse impacts caused by the project or plan.¹⁶³ Compensation measures must replace these impacts and, rather more, provide added value in comparison to existing European Member State obligations. In Germany, national compensatory obligations pursuant to §§ 15(2), 30(3) of the Federal Nature Conservation Act (BNatSchG) that are related to proposed developments can thus also be compensatory measures.¹⁶⁴ However, in accordance with Article 6(1) HD, legally required conservation measures are excluded.¹⁶⁵ The distinction between conservation measures and compensatory measures for coherence is, however, difficult in practice as conservation measures in the sense of Article 6(1) HD not only includes

¹⁵⁷ BVerwG, adjudication of 6.11.2013 – 9 A 14.12, margin number 93. Settled case law, e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 418–420, adjudication of 6.11.2012 – 9 A 17.11, margin number 82; adjudication of 12.3.2008 – 9 A 3.06, margin number 199 *et seq.*

¹⁵⁸ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 419; adjudication of 6.11.2013 – 9 A 14.12, margin number 93; adjudication of 12.3.2008 – 9 A 3.06, margin number 200.

¹⁵⁹ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 419; decision of 14.4.2011 – 4 B 77.09, margin number 29. This demanding *Therivel* Environmental Impact Assessment Review 2009, 261 (Fig. 2 at p. 263).

¹⁶⁰ *cf.* to the practical challenges McGillivray 2015, p. 101 (106 *et seq.*).

¹⁶¹ BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 420; adjudication of 6.11.2013 – 9 A 14.12, margin number 94; adjudication of 12.3.2008 – 9 A 3.06, margin number 201.

¹⁶² BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 421; adjudication of 6.11.2013 – 9 A 14.12, margin number 94; adjudication of 12.3.2008 – 9 A 3.06, margin number 202.

¹⁶³ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 88.

¹⁶⁴ *cf.* Milieu, IEEP and ICF 2016, p. 106.

¹⁶⁵ European Commission 2012a, p. 11 *et seq.*; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 422; adjudication of 8.1.2014 – 9 A 4.13, margin number 74; adjudication of 6.11.2012 – 9 A 17.11, margin number 82.

maintenance measures but, due to Articles 1(lit. l), 2(2), 3(1) and 10 HD, also restoration measures and measures to improve the connectivity and coherence of the network.¹⁶⁶ Furthermore, based on Article 10 HD, Member States are generally required to promote the coherence of the Natura 2000 network which includes, in particular, the conservation and restoration of landscape elements that contribute towards creating the network. If we thus take a broad approach to our understanding of compulsory conservation measures, then hardly any scope remains for suitable qualitative and quantitative compensatory measures. The value-added principle must therefore not be taken to be absolute and without exception, to ensure that the developer is not obviated of its duty to compensate the impacts of the proposed development. Within the meaning of making a clear and thus practicable distinction, only those conservation measures should be excluded that are clearly intended as necessary in declarations on protected sites and the associated management plans.¹⁶⁷ In cases of doubt, a compensation measure for coherence is permissible as it does not constitute an intervention, but always improves the condition of the Natura 2000 network.¹⁶⁸ According to the BVerwG¹⁶⁹ the authority should have a margin of discretion about the allocation.

The following individual compensatory measures are among those that are recognised by the BVerwG:¹⁷⁰ the new designation of a Site of Community Importance;¹⁷¹ expansion of existing sites¹⁷² or the new creation or development of affected habitat types and habitat areas for species in other areas, e.g. through reducing the intensity of land use, alteration or transformation of land and forestry areas within or outside and adjacent to the site.¹⁷³

6. Conclusion

In line with Article 2(3) HD and the Principle of Proportionality mentioned in Article 5(4) TEU, the derogation procedure in Article 6(4) HD helps to align economic and social interests with conservation interests. To enable developments judged to be of

¹⁶⁶ cf. ECJ, adjudication of 15.5.2014 – C-521/12 – Briels, margin number 28-33; BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 422 *et seq.*; *Trouwborst* 2016, p. 219 (242 *et seq.*).

¹⁶⁷ cf. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 423; *Dolde/Lange* VBlBW 2015, 1 (4 *et seq.*).

¹⁶⁸ i.e., a coherence measure is better than a conservation measure that, while it has been planned, is never realised due to a lack of, e.g., financial resources.

¹⁶⁹ e.g. BVerwG, adjudication of 9.2.2017 – 7 A 2.15, margin number 421.

¹⁷⁰ cf. European Commission 2012a, p. 11 *et seq.*

¹⁷¹ BVerwG adjudication of 6.11.2013 – 9 A 14.12, margin number 101; decision of 14.4.2011 – 4 B 77.09, margin number 29 *et seq.*

¹⁷² BVerwG, adjudication of 28.3.2013 – 9 A 22.11, margin number 112; adjudication of 23.4.2014 – 9 A 25.12, margin number 88.

¹⁷³ BVerwG, adjudication of 6.11.2012 – 9 A 17.11, margin number 85 *et seq.*; adjudication of 23.4.2014 – 9 A 25.12, margin number 88; adjudication of 6.11.2013 – 9 A 14.12, margin number 103 *et seq.*

imperative reasons of overriding public interests and without an alternative solution, Article 6(4) HD allows projects and plans, even if the assessment under Article 6(3) HD comes to the conclusion, that adverse effects on the integrity of a Natura 2000 site cannot be excluded without reasonable scientific doubts. In these cases, the conservation interest is restricted to ensure the overall coherence of Natura 2000. Thus, on the one hand, compensatory measures become of high practical importance in Article 6(4) HD and must be sufficiently secured. On the other hand, the application and interpretations of Article 6(4) HD must not be stretched, but must be narrow, in order to achieve the overarching goals of the Habitats Directive, pronounced in Article 2, in ensuring the integrity of each Natura 2000 site and maintaining or restoring favourable conservation status of natural habitats and species of wild fauna and flora of Community interest within the biogeographic regions. The derogation procedure should not become the norm for projects and plans containing risks of significant effects on the integrity of sites. The general rule in Articles 6(3) HD is that such projects and plans are not allowed.

The intensive legal discussion and the comprehensive case law in Germany with regard to Article 6(4) HD are meaningful as the ECJ has as yet had little opportunity to enter into the individual requirements for a derogating authorisation. In particular, the BVerwG decisions in relation to this, which are well disposed towards proposed developments, have weakened the Natura 2000 appropriate assessment. The outcome of this is that derogating authorisations have become standard in Germany for governmental infrastructural development that is actually incompatible with conservation objectives. In spite of the more or less secured compensatory measures to ensure the overall coherence of Natura 2000, the resultant economic and social advantages contrast with the substantial disadvantages for the conservation aims in the affected Natura 2000 sites. Overall, all the smaller and greater derogations endanger the goals of the Habitats Directive. This raises significant doubts about the conformity of the German interpretation to the Directive. It remains incomprehensible why the European Commission does not include these conformity doubts in their actual infringement procedure against Germany from 2014, initiated due to insufficient designation of Natura 2000-sites.¹⁷⁴ However, this is in line with its own broad permission practices, as specified in its opinions based on Article 6(4) subparagraph 2 HD. Stricter ECJ decisions, as already given in Article 6(3) HD, could result in correction of the German decisions, as an ever greater number of German court proceedings also come before the ECJ.¹⁷⁵ Other Member States should therefore not adopt the German interpretation without hesitation.

Due to the precautionary principle and importance of Natura 2000 sites, the common heritage Article 6(4) HD should be applied restrictively as an exemption and

¹⁷⁴ *cf.* Reminder of the European Commission from 27.2.2015, no. 2014/2262.

¹⁷⁵ for reasons including because the BVerwG and the Higher Administrative Courts of the Länder are increasingly submitting questions to the ECJ (*cf.* most recently, e.g. in the case of ECJ, adjudication of 14.1.2016 – C-399/14).

must not become the standard. In this sense, the conditions for a derogation must be interpreted strongly, such that:

1. Imperative reasons of overriding public interest, which require the proposed development, must be essential to fulfilling weighty interests for the common good and actually necessary and they project or plan must be suitable to achieving the public aims without any reasonable doubt.

2. There are no reasonable alternatives, including system alternatives, alternative sites and the zero-option, by which the overriding public interest in the project or plan (e.g. regional development, employment, transportation of persons or goods from A to B) could also be reached without greater sacrifices for Natura 2000.

3. Adequate compensatory measures with a high probability of effectiveness are being taken and monitored for their effectiveness – both primarily at the cost of the developer – to preserve the overall coherence of Natura 2000, whereby the differentiation to conservation measures should not be so strict that no possibilities for compensatory measures remain.

Acknowledgement

The author thanks the reviewers for their very helpful comments and suggestions and Textworks Translations for the translation of the manuscript and the cited sections of decisions of the BVerwG.

References

- Bastmeijer K (2016) Ecological restoration in international biodiversity law: a promising strategy to address our failure to prevent? In: Michael Bowman, Peter Davies, Edward Goodwin (Ed.) *Research Handbook on Biodiversity and Law*. Edward Elgar, Cheltenham: 387–413. <https://doi.org/10.4337/9781781004791.00024>
- Blicharska M, Orlikowska EH, Roberge J-M, Grodzinska-Jurczak M (2016) Contribution of social science to large scale biodiversity conservation: A review of research about the Natura 2000 network. *Biological Conservation* 199: 110–122. <https://doi.org/10.1016/j.biocon.2016.05.007>
- Clutten R, Tafur I (2012) Are imperative reasons imperiling the Habitats Directive? An assessment of Article 6(4) and the IROPI exception. In G. Jones (Ed.) *The Habitats Directive - a Developer's Obstacle Course?* Hart Publishing, Oxford: 167–182.
- Dolde K-P, Lange M (2015) Sicherstellung der Kohärenz von Natura 2000 durch Maßnahmen aus Managementplänen. *Verwaltungsblätter für Baden-Württemberg*: 1–7.
- EEA – European Environment Agency (2015) State of nature in the EU: Results from reporting under the nature directives 2007–2012. EEA Technical report Band No 2/2015: 178 p.

- European Commission (2000) Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. 73 p.
- European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. 81 p.
- European Commission (2012a) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. 30 p.
- European Commission (2012b) Implementation of Article 6(4), first subparagraph, of Council Directive 92/43/EEC (Habitat Directive) period 2007–2011 - summary report. 15 p.
- European Commission (2013a) Building a Green Infrastructure for Europe. 24 p.
- European Commission (2013b) The Economic Benefits of the Environment Natura 2000 Network – Final Synthesis Report to the European Commission. 76 p.
- European Commission (2015a) The mid-term review of the EU Biodiversity Strategy to 2020. COM(2015) 478 final: 19 p.
- European Commission (2015b) The State of Nature in the European Union - Report on the status of and trends for habitat types and species covered by the Birds and Habitats Directives for the 2007–2012 period as required under Article 17 of the Habitats Directive and Article 12 of the Birds Directive. COM(2015) 219 final: 19 p.
- European Commission (2017) Nature and Biodiversity Newsletter NATURA 2000. Band 41: 16 pp.
- Jackson ALR (2014) Bund Naturschutz in Bayern Revisited: The Required Standard of Protection under the EU's Habitats Directive Prior to a Site's Adoption as a Site of Community Importance. *Journal of Environmental Law* 26: 495–506. <https://doi.org/10.1093/jel/equ029>
- Kettunen M, Terry A, Tucker G, Jones A (2007) Guidance on the maintenance of landscape connectivity features of major importance for wild flora and fauna - Guidance on the implementation of Article 3 of the Birds Directive (79/409/EEC) and Article 10 of the Habitats Directive (92/43/EEC). Institute for European Environmental Policy (IEEP), Brussels, 166 pp. http://ec.europa.eu/environment/nature/ecosystems/docs/adaptation_fragmentation_guidelines.pdf
- Krämer L (2009) The European Commission's Opinions under Article 6(4) of the Habitats Directive. *Journal of Environmental Law* 21: 59–85. <https://doi.org/10.1093/jel/eqn028>
- Landmann Rv, Rohmer G (2016) Umweltrecht – Umweltrecht: KrW-/AbfG, BBodSchG, BNatSchG, PRTR-Gesetz. loose-leaf. ed., C.H. Beck, Munich: 81. supplement consignment.
- Lorz A, Konrad C, Mühlbauer H, Müller-Walter MH, Stöckel H (2013) Naturschutzrecht – Naturschutzrecht mit Artenschutz und Europarecht/Internationales Recht. 3. ed., C.H. Beck, Munich: 951 p.
- Lütke S, Ewer W (2011) BNatSchG – Bundesnaturschutzgesetz - Kommentar. C.H. Beck, Munich: 651 p.
- McGillivray D (2012) Compensating Biodiversity Loss: The EU Commission's Approach to Compensation under Article 6 of the Habitats Directive. *Journal of Environmental Law* 24: 417–450. <https://doi.org/10.1093/jel/eqs007>

- McGillivray D (2015) Compensatory measures under Article 6(4) of the Habitats Directive. In Charles-Hubert Born, An Cliquet, Hendrik Schoukens, Delphine Misonne, Geert Van Hoorick (Ed.) *The Habitats Directive in its EU Environmental Law Context - European Nature's Best Hope?*, Routledge Research in EU Law. Routledge, London, New York: 101–118.
- Millenium Ecosystem Assessment (2005) *Ecosystems and Human Well-being: Synthesis*. 155 pp.
- Meßerschmidt K (2014) *Bundesnaturschutzrecht : Kommentar zum Bundesnaturschutzgesetz, Vorschriften und Entscheidungen*. loose-leaf. ed., Rehm, Heidelberg: 119. supplement consignment.
- Milieu, IEEP, ICF (2016) *Evaluation Study to support the Fitness Check of the Birds and Habitats Directives*. 668 p.
- Möckel S (2014) 35 Years of the EU Birds Directive in the Light of the Court Practice of the European Court of Justice and the German Federal Administrative Court. *Journal for European Environmental & Planning Law* 11: 392–418. <https://doi.org/10.1163/18760104-01104005>
- Möckel S (2017) The European ecological network “Natura 2000” and the appropriate assessment for projects and plans under Article 6(3) of the Habitats Directive. In: Möckel S (Ed.) *Natura 2000 appropriate assessment and derogation procedure – legal requirements in the light of European and German case-law*. *Nature Conservation* 23: 1–29. <https://doi.org/10.3897/natureconservation.23.13599>
- Persson J, Larsson A, Villarroja A (2015) Compensation in Swedish infrastructure projects and suggestions on policy improvements. *Nature Conservation* 11: 113–127. <https://doi.org/10.3897/natureconservation.11.4367>
- Schumacher J, Fischer-Hüftle P (2011) *BNatSchG – Bundesnaturschutzgesetz Kommentar*. 2. ed., Kohlhammer, Stuttgart: 1043 p.
- Sundseth K, Roth P (2013) Study on Evaluating and Improving the Article 6.3 Permit Procedure for Natura 2000 Sites. Europäische Kommission (http://ec.europa.eu/environment/nature/natura2000/management/docs/AA_final_analysis.pdf): 104 p.
- TEEB - The Economics of Ecosystems & Biodiversity (2011) *The Economics of Ecosystems and Biodiversity Ecological and Economic Foundations*. 456 p.
- Therivel R (2009) Appropriate assessment of plans in England. *Environmental Impact Assessment Review* 29: 261–272. <https://doi.org/10.1016/j.eiar.2009.01.001>
- Trouwborst A (2016) Countering fragmentation of habitats under international wildlife regimes. In Michael Bowman, Peter Davies, Edward Goodwin (Ed.) *Research Handbook on Biodiversity and Law*. Edward Elgar, Cheltenham: 219–244. <https://doi.org/10.4337/9781-781004791.00016>
- Unnerstall H (2006) ‘Sustainable development’ as a criterion for the interpretation of Article 6 of the habitats directive. *European Environment* 16: 73–88. <https://doi.org/10.1002/eet.408>
- Ureta AG (2007) Habitats Directive and Environmental Assessment of Plans and Projects. *Journal for European Environmental & Planning Law* 2: 84–94. <https://doi.org/10.1163/187601007X00091>
- Winter G (2010) Alternativenprüfung und Natura 2000. *Natur und Recht* 32: 601–606. <https://doi.org/10.1007/s10357-010-1935-4>