

"Towards an improved implementation of the Birds- and Habitats Directive"

An inventory of experiences in Austria, England, Flanders and the Netherlands in relation to two dilemma's

M.E.A. Broekmeyer, C.J. Bastmeijer and D.A. Kamphorst





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Abstract:

Two approaches to achieve conservation objectives in Natura 2000 sites have recently received much attention from the Dutch government. The first approach applies to Natura 2000-sites where active investments in the site's conservation objectives are stimulated by combining economic development and ecological restoration. The second approach relates to providing space for natural processes or restoration projects with a focus on the functioning of the ecosystem, rather than only species or habitat type specific approaches. While the Ministry of Economic Affairs considers both approaches very promising for speeding up the process towards achieving the Natura 2000 conservation objectives, the approaches can turn into dilemma's because at least some characteristics of the approaches appear to be problematic in view of the European case law relating to article 6 of the Habitats Directive. The aim of the research was to investigate whether the two dilemmas are also experienced in Austria, England and Flanders and, if so, how they address the legal challenges. This report first discussed the legal framework of article 6 of the Habitats Directive, with special attention for the terms 'deterioration' and 'integrity of the site', and the precautionary principle. Next, the outcomes of the comparative research are described. In the final part of the report, the main findings have been summarised and the spotlight is turned on the Netherlands again: What could we learn from views and approaches in other Member States and could these lessons learned limit or solve the dilemmas in the Netherlands?

Keywords: Habitats Directive, Birds Directive, Natura 2000, European Court of Justice, deterioration, integrity of the site, precautionary principle, conservation objectives, Habitats Assessment, natural dynamics, nature-inclusive developments, Austria, England, Flanders.

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Photo cover: Water storage and nature development, specifically for weatherfish (Misgurnus fossilis), spined loach (Cobitis taenia) and bitterling (Rhodeus sericeus), in Nature 2000 site 'Pompveld-Andelsch Broek'. Photo: Fabrice Ottburg.

Content

	Pref	Preface				
	Sum	nmary	7			
1	Intr	Introduction				
	1.1	Dilemmas in implementing Natura 2000 in the Netherlands	11			
	1.2	Research questions	11			
	1.3	Research design and structure of the report	12			
		1.3.1 Description of dilemma's and casus illustration	12			
		1.3.2 Constituting the legal framework of the Natura 2000 regime	12			
		1.3.3 Comparative research in other member states	13			
		1.3.4 Conclusions - best practices within the limits of the legal framework	14			
2	Dile	Dilemmas and casus illustration				
	2.1	Dilemma 1: Connecting economic development and ecologic restoration 2.1.1 How much space does the Natura 2000-regime leave for plans and projects that connect economic development and ecological development	15 nt			
		or restoration?	15			
		2.1.2 Casus: 'Noordwijkse Golfclub'	17			
		2.1.3 Preliminary conclusion	18			
	2.2	Dilemma 2: Combining an ecosystem approach with existing nature values	19			
		2.2.1 How much space does the Natura 2000 regime leave for natural dynam				
		due to natural processes or due to restoration projects?	19			
		2.2.2 Cases	20			
		2.2.3 Preliminary conclusion	22			
3	Cons	stituting the legal framework	23			
	3.1	Introduction	23			
	3.2	Deterioration	23			
		3.2.1 The character of deterioration	24			
		3.2.2 Causes of deterioration	25			
		3.2.3 3.2.4. Reference state for determining deterioration and space for				
		ecological dynamics	26			
	3.3	Integrity of the Site	28			
		3.3.1 Ecosystem approach	29			
		3.3.2 Characteristics of the site that make the site fitted for the qualifying				
		Nature 2000 species and habitat types	29			
		3.3.3 Are ecological dynamics part of the 'integrity of a site'?	30			
		3.3.4 For which habitat types and species a site must be designated	31			
		3.3.5 Consequences for plans and projects	32			
	3.4	The precautionary principle and Article 6 of the Habitats Directive	33			
		3.4.1 The Precautionary Principle and Article 6(1) and 6(2)	33			
		3.4.2 The precautionary principle and the question of whether an appropriate				
		assessment must be made	34			
		3.4.3 The precautionary principle and the question whether an authorization	25			
		for the plan or project may be issued	35			
		3.4.4 The distinction between mitigation and compensation and the	2.0			
	2 5	Precautionary Principle The logal framework for approaches to address the dilammas	36			
	3.5	The legal framework for approaches to address the dilemmas	38			

4	_	Comparative research: experiences with the dilemmas in other Member States 41					
	Member States						
	4.1	Gene	ral characteristics of the Natura 2000 network	41			
	4.2	Austr	ria	45			
		4.2.1	Implementing Natura 2000 – general characteristics	45			
		4.2.2	Terms and principles of the Natura 2000-regime	48			
		4.2.3	Dilemma A: Connecting economic development and ecological				
			restoration	50			
		4.2.4	Dilemma B: combining an ecosystem approach with existing nature values	51			
	4.3	Flanc		52			
		4.3.1	Implementing Natura 2000 in Flanders – general characteristics	52			
			Terms and principles of the Natura 2000-regime	54			
			Dilemma A: Connecting economic development and ecological restoration	on 56			
			Dilemma B: combining an ecosystem approach with existing nature values				
	4.4 England						
		4.4.1	Implementing Natura 2000 in England – general characteristics	59			
		4.4.2	Terms and principles of the Natura 2000-regime	61			
		4.4.3	Dilemma A: Connecting economic development and ecological				
			restoration	63			
		4.4.4	Dilemma B: combining an ecosystem approach with existing nature				
			values	65			
5	Conc	lusior	ns - best practices within the limits of the legal framework	68			
	5.1	Dilen	nma A: Approaches connecting economic development and ecologic				
		resto	ration	68			
			The legal framework	68			
			Recognition of dilemma by Member States	68			
			Options to deal with nature-inclusive plans and projects	70			
			Practice of the Member States	71			
	5.2		nma B: Approaches combining natural dynamics with existing nature				
		value		73			
			The legal framework	73			
			Recognition of the dilemma by Member states	74			
			Options to deal with natural dynamics	75 76			
	F 2		Practice of the Member States	76			
	5.3		t these approaches limit or solve the dilemmas in the Dutch context? Limiting or solving dilemma A in the Netherlands	77 77			
				77 79			
	A		List of respondents				
	Anne		List of respondents	81			
	Anne		Interview format for respondents	82			
	Anne		Case law from the Court of Justice of the European Union (CoJEU)	84			
	List o	of refe	erences	85			

Preface

This report is the result of a joint research project by Wageningen Environmental Research (Alterra, Wageningen) and Legal Advice for Nature (Tilburg) to investigate the legal space for two approaches regarding the implementation of the area protection provisions of the EU Birds and Habitats Directives. The first approach relates to the stimulation of combining economic development and ecological restauration in Natura 2000 areas, by promoting integrated projects. The second approach aims to give more emphasis to natural processes in the protection and restoration of Natura 2000 sites. While the Dutch Ministry of Economic Affairs considers both approaches important for achieving the objectives of Natura 2000, it is also well aware of possible legal tensions between these approaches and components of article 6 of the Habitats Directive, particularly in the light of recent case law of the European Court of Justice of the EU.

Against this backdrop, the Ministry of Economic Affairs has funded this comparative research, involving Austria, England and Flanders. The aim of the research was to investigate whether the two dilemmas are also experienced in these other Member States and, if so, how they address the legal challenges. This research was partly based on a thorough study of the relevant legislation and policy documents, but input by experts from these countries has been essential for ensuring a high quality. Therefore, we would like to sincerely thank our respondents who agreed to collaborate with us: Volker Mauerhofer (Austria), Hermann Hinterstoisser (Austria), Hendrik Schoukens (Flanders), Wouter Faveijts (Flanders), Thomas Defoort (Flanders), Karolien Vankerckhove (Flanders), Christina Cork (England), Steve Clifton (England), Wilbert van Vliet (England), and Caroline Chapman (England). Through comprehensive interviews, bilateral discussions and comments on our draft report, they have helped us to ensure a good understanding of the implementation of Natura 2000 in the relevant countries and in the experiences and perceptions regarding the dilemmas.

We also would like to acknowledge the important role of the members of the advisory committee of the Ministry of Economic Affairs. The discussions were very helpful to ensure a clear focus and prioritisation of the most important questions, as well as to identify 'lessons learned' for the Netherlands in the final chapter of the research.

Mirjam Broekmeyer, Kees Bastmeijer and Dana Kamphorst

Summary

Introduction of the aim of the research

Two approaches for strengthening the implementation of the Birds- and Habitats Directives in the Netherlands have recently been stimulated by the Dutch government. The first approach is to combine societal and economic development and ecological restoration in Natura 2000 sites by stimulating integrated projects, in which project developers realize nature development. This approach could result in space for societal and economic development as well as a faster realisation of Natura 2000 conservation objectives. The second approach strives for a shift from an emphasis on protection of specific habitats types and species, to allowing more natural processes or ecosystem restoration projects, which may play a fundamental role in achieving the European conservation objectives. Both approaches reflect the ambitions of the Dutch government as described in the nature vision document 'The natural way forward' (Natuurlijk verder) published in 2014.

Although these approaches may strengthen the efforts to achieve the goals of the European nature directives, at the same time European case law relating to Article 6 of the Habitats Directive seems to leave limited space for these approaches. Realisation of the ambitions therefore confronts the Dutch government with dilemmas. To explore the limits of the approaches in view of the legal framework and to investigate whether approaches of other Member States may be useful to limit or solve the Dutch dilemmas, Wageningen Environmental Research and Legal Advice for Nature conducted a research for the Dutch Ministry of Economic Affairs. The results of this research are published in this report.

This report firstly explains the dilemma's and Dutch cases in more detail. Next, the report focusses on the legal framework by analysing relevant European Court cases and guidance documents of the European Commission, with special attention to the terms 'deterioration', 'integrity of the site' and the precautionary principle. These are central terms in the article 6 Habitats Directive regime and are of particular relevance for defining the legal framework in respect of conservation measures and the assessment and permitting of plans or projects in or near Natura 2000 sites. Based on this better understanding of the dilemmas and legal framework, the report discusses the main outcomes of a comparative research relating to the Member States Austria (focus on federal state Salzburg), United Kingdom (focus on England) and Belgium (focus on Flanders). First, the legislation and policy documents have been studied to understand the national system of implementing the Birds- and Habitats Directive, for instance, in relation to the selection and designating of Natura 2000 sites and setting conservation objectives. Next, in-depth interviews have

Main conclusions of the report

dilemma's.

Dilemma A: Combining economic development and ecological restoration within the Natura 2000regime

been conducted with legal and policy experts to study and discuss the implementation system, the relevance of the dilemma's in their countries, as well as possible approaches to address these

The first dilemma relates to the question how much space the article 6 regime of the Habitats Directive leaves for plans and projects that combine economic developments with ecological restoration, which investment is more than the obliged mitigation or compensation measures. In the Netherlands there have been several examples of nature-inclusive projects in Natura 2000 sites, which on the one hand would affect certain Natura 2000 values but on the other hand aimed at establishing a positive effect for such values at the site-level by creating these values elsewhere. As a result the conservation objectives of the site could be achieved sooner.

European case law, particularly the Briels judgement (C521/12) and the Orleans judgement (C-387/15) has limited the opportunities for such types of nature-inclusive projects. The Briels judgement made a clear distinction between mitigation and compensation measures in case of habitat creation. Habitat creation to neutralise the negative effects on a habitat type has to be considered as compensation under article 6.4 Habitats Directive and so requires also an assessment of alternative solutions and imperative reasons of overriding public interest. Moreover, the Orleans case makes clear that anticipating on future nature restoration measures when conducting an assessment under article 6.3 as the basis for issuing a permit is not in conformity with the Article 6 regime.

The respondents agree that, taking into account the Briels and Orleans judgements, there are three options to combine economic and ecological development within the scope of the Article 6 regime:

- 1. prevent the significant impacts of a plan or project (real mitigation) within the framework of Article
- 2. if mitigation is insufficient to prevent (the risk of) significant effects: application of Article 6.4;
- 3. link economic investment with nature protection by ensuring that ecological restoration first results in the achievement of the site's conservation objectives with a surplus before concluding on the appropriate assessment and authorization of a plan or project in the framework of Article 6.3.

Although option 1 may be preferred from the perspective of the objectives of the directives, this option will not always be available. The 'message' of the EU Court through its judgements may have been that - if mitigation is not possible - article 6.4 could be applied in case a plan or project is considered important because of imperative reasons of overriding public interest. However, this procedure is seldom applied in the selected countries and - though in England guidance has been produced to increase the awareness on the accessibility of article 6.4 procedures - none of the respondents have noticed an increase in article 6.4 procedures since the judgements yet.

The third option may be of particular relevance if a plan or project will most likely not fulfil the requirements of article 6.4 or if a developer is reluctant to enter into the legal debates on these requirements. Developers could then play a role in conducting restoration measures: if these measures are taken first and the conservation objectives are met with a surplus, the impact of a plan or project may be below the significance threshold and therefore be authorised under article 6.3. In view of the Briels and Orleans judgements, the condition is that the assessment takes place and the permission of the competent authorities is issued after the surplus has been created. However, this approach may be difficult to implement in practice as the conservation status of most Natura 2000 values in the Netherlands and neighbouring countries is unfavourable, which makes it difficult to achieve the objectives and create a surplus in the short term.

Furthermore, not all respondents agree on the legal feasibility of this approach: respondents in England and Austria emphasise the distinction between conservation measures under article 6.1 and mitigation or compensation measures under 6.3 and 6.4. In their view, developers should not be asked to take 6.1 measures as member states have to fulfil their own obligations to implement the Nature Directives and should not take advantage of private economic developments. Nonetheless, it appears worthwhile to investigate this approach further, particularly for plans and projects that would not fulfil the conditions of article 6.4.

Apart from this option, the desk study and interviews have not put forward any new approach that could be beneficial in the Dutch situation. Generally, this report confirms that investing in the conservation objectives is the most promising way to create more space for economic developments. Dilemma B: Combining an ecosystem approach with implementing Natura 2000

The second dilemma concerns the question how much space the Natura 2000 regime leaves for natural dynamics, due to natural processes or restoration projects. These dynamic processes can result in a better functioning of the ecosystem as a whole, leading to more robust and resilient systems. However, dynamic processes can also result in negative effects or even the loss of certain habitat types or species for which the Natura 2000 site was designated. Article 6.2 of the Habitats Directive states that deterioration of natural habits and habitats of species must be avoided. The case law of the EU Court of Justice makes clear that this provision must be strictly interpreted and applied. The Gibraltar judgement (C-6/04) of the EU Court of Justice clarified that this prohibition is not limited to external human-caused impacts. Similar concerns in respect of article 6.2 may be experienced when planning and conducting ecological restoration projects, but in these situations extra challenges may arise within the framework of article 6.3. Projects that are solely necessary to implement the obligations under article 6.1 Habitats Directive do not require an assessment under Article 6.3, however, as soon as any component of the project is not necessary for the management of the site, article 6.3 applies.

All respondents agree that the legal conditions for using natural processes to achieve the conservation objectives, depend on the nature of the habitat types and the size of the site. For natural, primary habitats, non-intervention management could be beneficial to maintain or improve the conservation objectives. Implementing an ecosystem approach with no or limited human intervention may not be the most appropriate management in semi-natural habitat types. As explained in the Wilderness guideline of the EU Commission in such sites many Natura 2000 values can only survive through active management measures. The current unfavourable conservation status of many Natura 2000 values make such measures often essential for achieving the conservation objectives at site level and the national level.

There are several options to find a balance between the requirement of the Natura 2000 regime and site management (partly) with space for natural dynamics. For instance, ecosystem considerations may play a role in the selection of Natura 2000 sites as well as in setting priorities when defining the conservation objectives for Natura 2000 sites. Furthermore, ecological dynamics may be anticipated and incorporated in the conservation objectives. This also applies to conservation objectives in one site that require conflicting management approaches. If a certain management approach is necessary for achieving the objective regarding a certain Natura 2000 value while it cannot be avoided that this approach has a negative effect for another Natura 2000 value, this may be reflected in the site's conservation objectives. In such a situation, the negative effects may not be considered as deterioration under article 6.2, although the Member States must of course ensure that also the affected value will maintain or be restored in a favourable conservation status at the national level. Other options to ensure a balance between the strict regime of Natura 2000 and ecological dynamics relate to the various ways in which the implementation system may be updated. From this perspective, it is interesting to notice that Flanders applies the Natura 2000-regime also to Natura 2000-species for which no sites must be designated (Annex IV species that are not listed on Annex II Habitat Directive).

These options are known to the respondents in the other countries and are used to a certain extent. However, tensions between ecological dynamics and the Natura 2000 regime appear to be considered less problematic in other countries. This may be largely explained by the fact that the discussions on dilemma B in the Netherlands originate from and focus on a few unusual situations, particularly situations where the government aims to support a shift from one ecosystem to another. The comparative study shows that comprehensive restoration projects in Natura 2000 areas, such as the Dutch cases Grevelingen and Oostvaardersplassen, are not common in the other countries. The study shows that within the framework of Natura 2000, other countries have no or limited experience with such situations. They also emphasize that they have experienced no problems when implementing ecosystem restoration projects under the European LIFE-programme.

Future

Strategically it appears indispensable to invest actively in achieving the conservation objectives as both dilemma's appear to be larger when Natura 2000 value are in a (very) unfavourable conservation status. With regard to combining economic developments and ecological restoration, achieving the conservation objectives with a surplus may be the best chance to ensure that impacts of an economic development will be assessed as insignificant under article 6.3. It would also be worthwhile to study the possible added value of enlarging Natura 2000 sites or integrating relatively small existing sites in one much larger Natura 2000 site. Based on the legal framework as discussed in this report, such an approach might support the further strengthening of a good balance between space for ecological dynamics and an effective protection of habitat types and species. For instance, the appearance and disappearance of habitat types or species in parts of such a large site due to ecological dynamics might be less problematic if such changes do not affect the achievement of the conservation objectives of the larger site. Large areas that include 'site fabric', a term used in the English implementation system which is similar to the Dutch concept of 'cement tussen de stenen', may also leave more space for the options to combine economic and ecological developments, as it could provide space for taking restoration measures elsewhere in the site. Furthermore, an approach of larger Natura 2000 sites could create more opportunities for ecological restoration and, consequently, a faster fulfilment of the conservation objectives. This may eventually be the most promising strategy to limit both dilemma's.

Introduction 1

1.1 Dilemmas in implementing Natura 2000 in the **Netherlands**

In 2015, within the framework of the discussions relating to the Fitness Check of the EU Birds Directive and Habitats Directive (BHD), an inventory was made of obstacles and opportunities that Dutch stakeholders had been experiencing in the practice of implementing these directives. This inventory was based on concrete case studies and workshops and was conducted in assignment of the Ministry of Economic Affairs with the aims of identifying options for strengthening the implementation of the directives as well as getting a better understanding of the consequences of such obstacles and opportunities for the implementation of the central government's 2014 nature vision document, The Natural Way Forward (Ministerie van EZ, 2014). While the outcomes of this previous research project have been discussed in more detail elsewhere (Broekmeyer & Pleijte, 2016), two main approaches in the Netherlands within the field of the Natura 2000sites, SAC's as well as SPA's were identified. The first approach relates to initiatives to ensure that economic development goes hand-in-hand with ecological restoration in the benefit of the Natura 2000 conservation objectives. The second approach relates to establishing more robust ecosystems in Natura 2000sites by leaving space for natural processes and/or by implementing nature restoration projects.

At the same time the Natura 2000-regime as interpreted by the Court of Justice of the EU (CoJEU) in, for example, the Gibraltar Arrest, the Briels Arrest, the Sweetman Arrest and the Orleans Arrest, appears to leave limited space for implementing these approaches.

Thus, what makes both approaches 'dilemmas' is the fact that:

- On the one hand, there appears to be broad agreement that the approaches may strengthen the efforts for achieving the objectives of both EU directives.
- On the other hand, that at least some characteristics or aspects of the approaches appear to be problematic in view of case law of the Court of Justice of the EU (CoJEU) regarding the Natura 2000 regime.

These dilemmas have received quite some attention in recent debates on the implementation of Natura 2000 in the Netherlands¹. Particularly in view of the European Commission's decision that the Birds Directive and Habitats Directive are 'fit for purpose' and that efforts should focus on an improved implementation of the directives, more detailed research on these dilemmas and possible solutions within the limits of the Natura 2000-regime is desirable.

1.2 Research questions

Against this backdrop, the ministry of Economic Affairs (also responsible for biodiversity protection) has requested Wageningen Environmental Research, in cooperation with Legal Advice for Nature, to study the two dilemmas more thoroughly and to conduct a comparative research to study the extent to which other Member States experience similar dilemmas and whether these Member States have developed approaches in their domestic implementation legislation and/or in the implementation practice that solve the dilemmas. Consequently, this project aims to study and answer the following three research questions:

a. How much space does the regime of Article 6 of the Habitats Directive (hereinafter: the Natura 2000 regime) leave for plans and projects that connect economic development and ecological development?

https://www.rijksoverheid.nl/documenten/kamerstukken/2015/05/18/kamerbrief-over-nederlandse-inzet-in-de-fitnesscheck-vogel-en-habitatrichtlijn

- b. How much space does the Natura 2000 regime leave for ecological changes in Natura 2000 sites due to natural processes or due to nature restoration projects?
- c. Do other Member States also experience the two dilemmas?
 - If not, how may this be explained?
 - If yes, have these Member States developed approaches that may prevent, limit or solve the dilemmas?
 - If yes, are these approaches within the limits of the Natura 2000-regime as defined by the answers to questions a) and b)?
- 4. What could we learn from approaches in other Member States and might these approaches limit or solve the dilemmas in the Dutch context?

1.3 Research design and structure of the report

It is tempting to focus directly on the pro- and contra-arguments for various answers to the above questions. However, such an approach would have a severe risk of incomplete answers that would be too much based on the Dutch approach in implementing Natura 2000. While it is true that the approaches and dilemma's derive from experiences with the Natura 2000 regime in the Netherlands, this research has been designed to ensure a certain distance from the Dutch implementation system when studying and answering the research questions. This has been achieved through a research approach with the following steps.

1.3.1 Description of dilemma's and casus illustration

First, the two dilemmas that constitute the central topic of this comparative research, are described in more detail and are illustrated by Dutch cases against the background of the most relevant case law of the Court of Justice. As explained in the introduction, the dilemmas arise from Dutch research on the opportunities of and obstacles for the implementation of the Birds and Habitats Directives in the Netherlands (Broekmeyer & Pleijte, 2016). Comparable dilemmas are also appointed in an unpublished note by the Ministry of Economic Affairs². The cases are selected in close cooperation with the Ministry of Economic Affairs, being current examples which illustrate the dilemmas.

In discussing the dilemmas and the illustrative Dutch cases, we will also discuss the most relevant judgments of the Court of Justice as these judgments raise serious doubts on whether the approaches of the dilemmas are in conformity with the Birds and Habitats Directives. The discussion will not yet be complete but illustrates the tensions between the argument in favour of the approaches and the Natura 2000 regime.

Results are presented in chapter 2

1.3.2 Constituting the legal framework of the Natura 2000 regime

Building on the description of the dilemmas and the discussion of the most important CoJEU case law, the next step is an in-depth study of the questions a) an b): the space and flexibility within (and therefore also the limits of) the Natura 2000 regime for connecting economic and ecological investments (dilemma 1) and for allowing ecological dynamics and change (dilemma 2). This legal framework constitutes an important fundament for a better understanding of the dilemmas, for understanding the extent to which these are experienced in the practice of implementing Natura 2000 in the selected Member States and for searching for best practices in these Member States.

Although it is tempting to directly focus the discussions on the questions a) and b), the discussions of the dilemmas and most relevant case law indicate that it is useful to first discuss three terms and

Notitie Ministerie van EZ: Een meer werkbare toepassing van de Habitatrichtlijn en Vogelrichtlijn; top 10 knelpunt en oplossingen uit een juridische invalshoek

concepts that have a central position in the Natura 2000 system and that appear important for establishing more clarity on the space within the Natura 2000 regime for addressing the dilemmas:

- The concept of 'deterioration' of Article 6(2) HD;
- The 'integrity of the site' as used in Article 6(3) HD;
- The requirements deriving from the 'precautionary principle' in relation to the Article 6 regime.

First, a detailed analysis has been made of the CoJEU case law in respect of these terms and concepts. Next, the terms and concepts have been studied on the basis of a study of the text of the Directives and guidance and policy documents of the European Commission.

On the basis of this better understanding of the three terms and concepts, attention is focused on discussing and answering research questions a) and b). Results are presented in chapter 3.

1.3.3 Comparative research in other member states

Next, a comparative research has been conducted for getting a better understanding of the extent to which the two dilemmas are also experienced in other Member States and, if so, what approaches have been developed to address these dilemmas. For the selection of Member States, we started with a list of 8 potential countries: Flanders (Belgium), Northrhein Westfalen (Germany), France, England (UK), Denmark, Austria, Sweden and Spain, which each had a feature relating to the dilemmas which seemed interesting. The final selection was based on the following criteria3:

- First indications (through contacting experts in a larger number of EU Member States) that the dilemmas are of relevance in the practice of implementing Natura 2000;
- Similarities and differences between the implementation systems;
- Similarities and differences between the type of pressures on the Natura 2000 sites;
- Chance of finding relevant examples;
- Feasibility of the research within the defined time limits (access to documents; language) and network of experts willing to collaborate.

As a result Austria (focus: Salzburg), Belgium (focus: Flanders) and the United Kingdom (focus: England) have been selected for the comparative research.

The comparative study is based on research of the domestic implementation legislation, policy documents and the literature, to get a view on the general characteristics of the implementation system of the selected countries. Next we conducted interviews with experts involved in the implementation of Natura 2000 in the relevant country (see Annex 1). The interview format was based on the analysis of the case law of the EUCoJ and set up in cooperation with the Ministry of Economic Affairs. The format was send to the respondents in advance of the interviews (see Annex 2). Interviews were done by skype or phone. A verbatim transcript was send to the respondents to check whether we had understood them correctly. Within this report we anonymised the interviewees. In most cases the experts did send to the authors additional information (domestic case law, articles) which was used to complete the information per country and to check the results of the interviews. Next, the draft version of the country report was send to all respondents, to provide the option to point at misunderstandings, to add sources where desirable and to comment on the findings. Results are presented in chapter 4.

It is not the aim of this research to draw conclusions in relation to the implementation of Natura 2000 in the EU, which means that the extent to which the selected countries are representative for all systems in the EU has not been an explicit criterion for selection.

1.3.4 Conclusions - best practices within the limits of the legal framework

After this comparative research, the spotlight is turned on the Netherlands again: Based on the previous steps and the answers on research question a) b) and c), possible best practices or options for preventing or addressing the dilemmas in the Netherlands are identified (see research question d) above). First we will describe our conclusions to the first question: What could we learn from approaches in other Member States? Then we turn to the second part of our research question: Might these approaches limit or solve the dilemmas in the Dutch context? Results are presented in chapter 5.

Dilemmas and casus illustration 2

2.1 Dilemma 1: Connecting economic development and ecologic restoration

2.1.1 How much space does the Natura 2000-regime leave for plans and projects that connect economic development and ecological development or restoration?

Particularly during the last decade, project initiators in the Netherlands have regularly tried to prevent 'significant effects' of a plan or project under Article 6(3) of the Habitats Directive by taking positive measures for nature (offsetting the negative impacts by ecological restoration). In many cases a 'nature inclusive design' approach was followed: The view was that projects, that in itself could significantly affect the Natura 2000-site, could nonetheless be authorised because the negative effects were 'neutralised' by developing nature values similar to the lost values at other locations in the Natura 2000 area. Sometimes ecological restoration measures would not only offset negative effects but would even provide a surplus in quantity or quality of the habitat type or species population, thereby actively contributing to the conservation objectives of the site. These type of measures were presented as 'mitigation' under 6(3), also when these measures where not preventing the direct negative effects of the plan or project.

An example of a project for which this approach of mitigation under Article 6(3) HD was followed related to a road-widening project in the Netherlands. This case was challenged before the Dutch Council of State, which initiated a preliminary ruling of the Court of Justice of the EU to get more clarity on the terms mitigation and compensation. The appropriate assessment for the project made clear that negative impacts on 11.5 hectares of Molinia meadows in the Natura 2000 site could be caused due to traffic on the widened highway A2; however, because these negative effects would be offset by redevelopment of Molinia meadows elsewhere in the Natura 2000 area, the Dutch Minister of Infrastructure and Environment concluded that the integrity of the site would not be adversely effected4.

The CoJEU did not approve this interpretation of Article 6(3) by the Dutch Council of State, as was made clear in the Briels case (C-521/12). In this case the European Court distinguished explicitly between so-called mitigation measures and compensation measures in case of significant effects on habitat types of Annex I of the Habitats Directive. The Court concluded that the measures to offset the adverse impacts "are not aimed either at avoiding or reducing the significant adverse effects for that habitat type caused by the A2 motorway project; rather, they tend to compensate after the fact for those effects" and consequently, they "do not guarantee that the project will not adversely affect the integrity of the site within the meaning of Article 6(3) of the Habitats Directive" (para. 31 C-251/21). Based on an explanation of Article 6(3) and 6(4) HD and while emphasizing the importance of the precautionary principle embedded in this regime, the Court finally ruled:

Judgement of the Administrative Chamber of the Council of State ECLI:NL:RVS:2012:BY2504 paragraph 87.1

Briels case: the difference between mitigation and compensation

(C-521/12 - Judgement ECLI: EU: C: 2014: 330)

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that a plan or project not directly connected with or necessary to the management of a site of Community importance, which has negative implications for a type of natural habitat present thereon and which provides for the creation of an area of equal or greater size of the same natural habitat type within the same site, has an effect on the integrity of that site. Such measures can be categorized as 'compensatory measures' within the meaning of Article 6(4) only if the conditions laid down therein are satisfied" (para.40 Briels-case).

From the perspective of the Natura 2000-regime as explained by the Court and the Advocate Generals' conclusions for these cases, this strict interpretation may particularly be understood for two main reasons:

- Whether and the extent to which the envisaged natural restoration measures will be successful is uncertain, which means in light of the precautionary principle that it is also uncertain whether negative effects on the Natura 2000 site's integrity will be absent;
- Article 6(4) provides for an exoneration of the strict Article 6(3) regime, but only under strict conditions. The approach explained in the Briels case by the Dutch Ministry of Infrastructure and Environment would constitute a loophole for the application of Article 6(4) and particularly for those conditions (e.g., the absence of alternatives and the specific reasons for which an exoneration may be authorized).

Particularly in respect of the first argument regarding the timing of ecological restoration that is linked to a project, also the more recent Orleans case is of great relevance (C-387/15). In the Orleans case the Flemish Government stated that ecological restoration measures were taken, not to mitigate or compensate negative effects, but actually to achieve the conservation objectives under Article 6(1) HD: "according to the Flemish Government, at the time it becomes possible adversely to affect an existing area, the ecological core areas will already contribute to the integrity of the Natura 2000 site in question. The use of ecological core areas in the RDIP is therefore not a compensatory measure, but rather a conservation measure, within the meaning of Article 6(1) of the Habitats Directive" (para. 21 Orleans case).

Furthermore, in view of the Briels case and the concerns related to the precautionary principle, the Flemish Government ensured that – prior to the start of the project - the ecological restoration measures would be taken and the ecological success of these measures would be monitored:

"[...] In the present case, an ecologically resistant core area would be created prior to carrying out the port development. Therefore, the situation at issue in the main proceedings is not comparable to that which gave rise to the judgment of 15 May 2014 in Briels and Others since, in the case that gave rise to that judgment, the adverse effect on the existing area of a protected habitat was occurring without an area of the same type having been created beforehand" (para. 26 Orleans case).

So the Flemish government was of the view that this approach distinguished the case of the Briels case and that under these conditions it should be possible to authorize the project under Article 6(3) without the need to apply Article 6(4).

However, the Court of Justice did not agree with this interpretation and ruled:

Orleans case: the timeline of restoration of habitats and the authorization for projects (C-387/15 - Judgement ECLI: EU: C: 2016: 583)

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that measures, contained in a plan or project not directly connected with or necessary to the management of a site of Community importance, providing, prior to the occurrence of adverse effects on a natural habitat type present thereon, for the future creation of an area of that type, but the completion of which will take place subsequently to the assessment of the significance of any adverse effects on the integrity of that site, may not be taken into consideration in that assessment. Such measures can be categorized as 'compensatory measures', within the meaning of Article 6(4), only if the conditions laid down therein are satisfied" (para. 65 Orleans case).

So in this case the Court explains that the appropriate assessment, concluding that a plan would have no significant effect based on certain adverse impacts and uncertain ecological restoration measures, is not in line with the precautionary principle and therefore the conclusion that there will be no adverse effects can only be drawn after the restoration measures have been realized. According to the Court: "the benefits resulting from the creation of the nature reserves have already been taken into account in the assessment and in demonstrating the absence of significant adverse effects on the site even though the result of the creation of those reserves is uncertain, since it is not complete" (para. 55 Orleans case). Again the Court "emphasizes the fact that the assessment carried out under Article 6(3) of the Habitats Directive may not have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned" (para. 5 Orleans case). And as the project would result in the disappearance of a body of 20 hectares of tidal mudflats and tidal marshes of the Natura 2000 site in question, this makes it impossible to argue that the approach is in conformity with Article 6(1) and 6(2) (paras 37-41 Orleans case).

Although the Court's reasoning is logical in view of the Article 6-regime and the precautionary principle imbedded in it, the 'nature-inclusive approach' could in practice constitute a stimulus to establish positive effects for nature that would go beyond the minimum requirements of offsetting negative effects. Both the Briels and Orleans cases raise the question whether there are approaches in implementing Article 6 of the Habitats Directive that facilitate positive impulses for nature development/restoration when developing a plan or project. If Article 6(4) should be applied because measures are compensatory of nature, also the alternative test and the IROPI⁵-test have to be applied and passed. In case of economic developments that are not to be considered necessary for an overriding public interest, such plans or projects will not pass the test.

Since the above-mentioned Court cases, in the Netherlands there have been several examples where nature-inclusive plans where prohibited by the Court (see for example Frins, 2016), which illustrates the dilemma in the Dutch practice of implementing Natura 2000.

2.1.2 Casus: 'Noordwijkse Golfclub'

A case in the Netherlands that illustrates the first dilemma relates to the golf course of the Noordwijkse Golfclub. Due to a project aiming for the enlargement of the golf course of the Noordwijkse Golfclub, 1.8 ha of grey dunes of habitat type H2130 (Fixed coastal dunes with herbaceous vegetation) would disappear permanently in the Natura 2000-site 'Kennemerland-Zuid'. The conservation status in the Netherlands of grey dunes is 'unfavourable-bad' (due to an unfavourable-inadequate score for the Area and unfavourable-bad scores for Structure & Function and Future prospects). The conservation goal for the site is to increase the surface area and to improve the quality of the habitat type.

The project includes measures to restore the negative impact on the habitat type. The measures consist of the development and restoration of several other areas within the Natura 2000-site: 1.64 ha

Imperative reasons of overriding public interest

of transplantation of sods and 1.47 ha by mowing, grazing and other management measures in order to develop new habitat type H2130. In total a new area of 3.11 ha of grey dunes would be developed, being a larger area than the area that would be negatively affected.

So the aim of the project Noordwijkse Golfclub was to combine an economic development with an net ecological improvement of the site. Ecological specialists quaranteed that the measures would be effective and would improve the conservation status of the habitat type in the site. The restoration measures have earlier proven to be ecologically effective and they would be realised together with the enlargement (at the same time so no temporarily loss of habitat would occur). Therefore the competent authorities licensed the project, because overall there would be no significant effect on the conservation objective for grey dunes.

However, a Dutch NGO challenged this decision and the highest Administrative Court in the Netherlands (the Administrative Chamber of the Council of State) had to assess whether the authorisation was in conformity with the CoJEU's Briels judgment. The Council of State interpreted this judgment in a strict manner and concluded that the license was not allowed under Article 6(3) HD - in line with the Briels case - and that, consequently, the project could not be executed in the proposed way. Paragraph 11.7 of the Council of State's judgment states:

"The sod transplantation does not eliminate the adverse effects on the integrity of the Natura 2000 site by removing about 1.8 ha of the priority habitat type chalky grey dunes (H2130A). In view of this, the sod transplantation is not a mitigation measure."

Also the other restoration measures could not be regarded as mitigation measures:

"The measures are not aimed at preventing or reducing the adverse consequences arising directly from the project leading to the disappearance of about 1.8 hectares of this habitat type, but in enabling the development of a new area of this habitat type on the other mentioned locations."

2.1.3 Preliminary conclusion

The Briels Arrest and Orleans Arrest confirmed the importance of the terms "precautionary principle" and "integrity of the site".

The precautionary principle is incorporated in article 6.3 HD by the condition that competent national authorities shall only agree to a project after having ascertained that the project will not adversely affect the integrity of the site. The assessment carried out under Article 6(3) of the Habitats Directive cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. In both Court cases the advocate-general emphasised that positive effects of a creation of a new habitat in the future are very difficult to forecast with any degree of certainty. There may be no reasonable scientific doubt of the effect of the measures on the site. For the integrity of the site the Court refers in both arrests to the Sweetman Arrest (C-258/11). There will be no adversely effects on the integrity of a site if the natural habitats of Annex I HD are preserved at a favourable conservation status. More concrete this entails "... the lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site in the list of SCIs, in accordance with the directive" (para. 39 Sweetman case). This demonstrates that also policy for designation of sites, for setting favourable conservation objectives, and ultimately setting conservation objectives for Natura 2000-sites interfere with the terms "precautionary principle" and "integrity of the site". Within chapter 3 both terms will be analysed more extensively.

Judgement of the Administrative Chamber of the Council of State, ECLI:NL:RVS:2014:4630. Ibid., paragraph 11.8.

2.2 Dilemma 2: Combining an ecosystem approach with existing nature values

2.2.1 How much space does the Natura 2000 regime leave for natural dynamics, due to natural processes or due to restoration projects?

Natural processes or ecosystem restoration projects may play a fundamental role in achieving the conservation objectives of the relevant Natura 2000 site and may in fact be required under Article 6(1). Allowing for natural dynamics in Natura 2000 may under certain conditions (e.g. sufficient size, good environmental conditions, etc.) result in a better functioning of the ecosystems as a whole and may, after a certain period of time and depending on the situation, also increase the chances of successful and robust biodiversity protection and restoration. These dynamic processes could be stimulated by natural (non-intervention) management or by specific restoration projects. However, these dynamics may also result in negative effects for or even the loss of certain habitat types or habitats of species for which a Natura 2000 site has been designated. This may particularly be the case in situations where sites are designated for the resistant occurrence of natural or seminatural habitats, which are present due to former degradation of the site or human influence like eutrophication.

In the framework of Article 6 of the HD, one of the relevant questions is whether restoration projects have to be considered as necessary conservation measures under Article 6(1) HD and whether possible negative effects of such projects should be assessed under to Article 6(3) HD. When is a plan or project not directly connected with or necessary for the management of the site? Furthermore, if natural processes would negatively affect the site, another relevant question arises to what extent Member States are obliged to take appropriate steps to prevent deterioration of the site according to Article 6(2) HD.

In respect of the first question of how nature restoration projects should be assessed, the Guidance document on management of Natura 2000 sites of the European Commission (EC, 2000) makes clear that projects for nature restoration may be subjected to an appropriate assessment under Article 6.3 HD if not all components of the project are necessary for the management of the site. This view of the Commission is confirmed by the CoJEU in the arrest of the EC versus France (C-241/08). In this case one complaint focussed on the question whether there could be an exemption of works or developments under Natura 2000 contracts, from the procedure of appropriate assessment for the site. The Court confirms in this case the explanation of the Guidance document Management of Natura 2000-sites (EC, 2000):

Commission versus France: plans or projects not needed for the management of a site should be assessed under article 6(3) Habitats Directive

(C-241/08 - Judgement ECLI: EU: C: 2010: 114)

"In order to ensure fully the attainment of the conservation objectives referred to in the Habitats Directive, it is therefore necessary, in accordance with Article 6(3) of the Habitats Directive, that each plan or project, not directly connected with or necessary for the management of the site, which is likely significantly to affect the site be subject to an individual assessment of its implications for the site concerned in view of the site's conservation objectives (para. 54 Case EC against France)".

In respect of the second question, according to Article 6.2 HD Member States are obliged to take appropriate steps to prevent deterioration of the site by non-management. The CoJEU explains in the case of the Commission versus UK/Gibraltar (C-6/04) how deterioration in the meaning of Article 6.2 HD must be interpreted. In this case one complainant criticized the UK because of incomplete transposition of Article 6(2). The judgement of the Court clarifies that it may be necessary to adopt both measures intended to avoid external human-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in Natura 2000 sites to deteriorate.

Gibraltar case: deterioration due to natural developments should be avoided

(C-6/04 - Judgement ECLI: EU: C: 2005: 626)

"As the Advocate General has observed in point 19 of her Opinion, it is clear that, in implementing Article 6(2) of the Habitats Directive, it may be necessary to adopt both measures intended to avoid external man-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in SACs to deteriorate (para. 34 Gibraltar case)".

However, more recently there are indications that Natura 2000 leaves space for natural dynamics (see, e.g., the European Commission's Guidelines for Wilderness in Natura 2000). This makes it desirable to study in more detail the question how problematic it is under the Natura 2000 regime if natural processes or restoration measures in favour of certain Natura 2000 values in a Natura 2000 site result in negative effects for or even the disappearance of certain other Natura 2000 values in that site. Case law C-241/08 (Com vs France) also discusses the dilemma that certain conservation measures may be favourable for one habitat but can lead to deterioration of other types of habits (par. 52). The conclusion is that in the case of conflicting objectives, such conflicts may be taken into account when formulating the conservation objectives, as the Advocate General pointed out in point 71 of her Opinion (par. 53). It is also made clear that there is no obligation under Article 6.3 HD to assess negative impacts of Article 6.1 management measures, even if they may lead to a negative impact on the conservation objectives.

Commission versus France: negative effects due to management measures do not need an article 6(3) Habitats assessment

(C-241/08 - Opinion ECLI: EU: C: 2009: 398)

"Contrary to the Commission's opinion, Article 6(3) of the Habitats Directive does not compel measures relating to the management of the site to be subject to the assessment of the implications for the site if such measures could have an effect on certain conservation objectives. Setting conservation and restoration objectives may in fact require decisions to be made on conflicts between various objectives. Therefore it may be necessary to accept adverse effects on certain habitat types or species in order to facilitate other developments. Here, the relative importance of the respective conservation and restoration objectives for Natura 2000 is decisive (para 71. Cie versus France - Opinion)."

2.2.2 Cases

Two Dutch cases may illustrate the dilemma of taking an ecosystem approach in the benefit of implementing Natura 2000, while this approach may result in deterioration of certain Natura 2000 values present in the site.

The Grevelingen is a Natura 2000-site located in the South-west Delta in the Netherlands. It is a formal tidal area. Due to enclosing of the area by dams in 1971 it developed into a salt lake with dune habitats emerging on the shores and the islands. The area was designated as Special Protection Area under the Birds Directive in 2000 and selected as Site of Community Importance in 2003. The site has been designated in 2013 under the Birds- and Habitats Directive. The management plan was published November 2016.

Due to a lack of tidal influence the water quality is decreasing, leading to low oxygen contents for periods of time in the deeper parts of the salt-water lake. This is negatively affecting the benthic life and other species. This causes problems for the requirements of the Water Framework Directive but will also lead to a situation that conservation objectives for breeding-birds will not be achieved (Ministerie van I&M, 2014). Furthermore conservation researchers expect that due to autonomous developments like desalinisation, decalcification, succession and erosion, some nature values will decrease. On the long term habitat type H2190 (humid dune slacks) will be locally replaced by habitat type H2170 (dunes with Salix repens) (I&M, 2014). This may lead to deterioration of the HD-species H1903 (Liparis loeselii) (m.m. John Janssen) and the HD-species Root vole (Microtus oeconomus). The Dutch Government has developed a plan to make the system more stable and resilient, by partly restoring a more natural tide and increasing freshwater-saltwater gradients, mainly in order to fulfil the obligations of the WFD (Rijksstructuurvisie, 2014). This may have temporarily negative

implications for coastal breeding birds of the BD and may also negatively affect areas of the fen orchid (Liparis loeselii), a HD-species and on humid slack dunes (H2190). As a result, significant effects according to 6.3 HD cannot be ruled out. On the other hand there will be positive effects on Nature 2000-values e.g. species and habitats typical for estuaries.

Currently the Ministry of Economic Affairs as well as the management authority (Ministry of I&M -Rijkswaterstaat) are discussing how to achieve the conservation objectives of the site and which objectives reflect the robustness and naturalness of the ecosystem of the site the best. There is a dilemma between the goals of the WFD and the BHD. According to a publication of the European Commission⁸ the goals of the BHD can be adapted to the goals of the WFD. In that case the guestion remains how a member state should guarantee the FCS of the species and habitats concerned.

The casus Oostvaardersplassen illustrates that management measures needed to achieve most of the conservation objectives could lead to temporary deterioration of some qualifying species. The Oostvaardersplassen emerged after the diking of the Dutch Flevopolders during the years 1950-1968. For various reasons the area was not further developed for human activities and specific nature values emerged. In 1975 a dike was built around the area leading to a marshland of 3600 hectare in a polder below sea-level. The water level is actively managed by inlet of rainwater and surface water. In 1989 the site was designated as an SPA under the Birds Directive. In 2009 the conservation objectives were published for breeding and non-breeding bird species, 31 species in total. The terrestrial vegetation is influenced by herds of large grazing animals (horses, cattle and red deer) and grazing by geese, and ducks keep the water open.

In the present management the realisation of the Natura 2000-conservation objectives has top priority. The manager (Staatsbosbeheer) aims to achieve these objectives as far as possible through natural processes but will intervene when necessary (Staatsbosbeheer, 2011).

The site is now facing a problem with achieving the conservation objective under the Birds Directive. The current management is leading to a situation of older succession stadiums without the opportunity of a reset to pioneer stadiums, by absence of natural processes which would occur in a river delta. On the scale of the OVP-site and within the limits of a man-made diked area, a natural start of new succession stages (reset) is not possible. As a result the appropriate area for breeding- and foraging habitat for many bird species is decreasing. So, continuation of this current management by natural processes will result in not achieving the conservation objectives for 19 bird species.

To improve the situation of the site and to achieve the conservation objectives on the long term, an intervention is needed. Reversing the succession requires a one-time, large-scale reset of the water system. The measure consists of a temporary lowering of the water level (desiccation) followed by reinundation. The main purpose of these measures is regeneration of pioneer marsh vegetation as suitable habitat for (marsh)birds. Afterwards natural processes could take place again. As a result the conservation objectives of 11 of the 15 breeding species and 18 out of 19 non-breeding species will be achieved within 30 years. The period of 30 years is acceptable as a long term period for fluctuation taken into the account the dynamics and corresponding fluctuations in bird populations in this area. The designation makes this possible. On the negative side there is a risk that some species will not return after the intervention measure and more species than expected will temporarily disappear or decline.

The intervention measure is laid down in the management plan as a necessary conservation measure. The manager of the site (Staatsbosbeheer) as well as the competent authorities are discussing if the plan as whole should be subjected to article 6.3 HD and if so, how to deal with the likely temporary negative effects on some species (are they to be considered as significant or not, taking the natural fluctuations on a rather long time-scale into account)).

European Commission, 2011. Links between the Water Framework Directive (WFD 2000/60/EC) and the Nature Directives (Birds Directive 2009/147/EC and Habitats Directive 92/43/EEC). Frequently asked questions.

2.2.3 Preliminary conclusion

The Dutch dilemma illustrated by the cases described in the previous paragraph is mainly theoretical as these initiatives and the related measures to stimulate an ecosystem approach still have to start. Consequently, national court judgments on pro- and contra-arguments are not yet available. In both sites, Grevelingen as well Oostvaardersplassen, natural processes can on the one hand result in the achievement of some conservation objectives and on the other hand may lead to the deterioration or even loss of other values. Thus, defining conservation objectives to determine which ecological requirements are needed and prioritised appears to be essential, as illustrated by the Case of the Commission versus France (C-241/08). And ascertaining which measures are needed in order to achieve the ecological requirements is essential to decide whether a management plan should be subjected to the assessment under 6(2) or 6(3) HD.

Similar to the first dilemma, it may be observed that the terms 'deterioration', 'integrity of the site' and the 'precautionary principle' have a central position in the discussions on the dilemma, which justifies specific attention for these terms and concept in the next chapter.

Constituting the legal framework

3.1 Introduction

For studying the dilemmas and the search for best practices and possible approaches to address the dilemma's, it is important to have a good understanding of the requirements of and flexibility within Article 6 of the Habitats Directive (the Natura 2000 regime). For the purpose of establishing this legal framework, attention has been focused on three terms and concepts that have a central position in the Natura 2000 regime and that appear important for establishing more clarity on the space within the Natura 2000 regime for addressing the two dilemmas:

- The concept of 'deterioration' of Article 6(2) of the Habitats Directive.
- The terminology of 'integrity of the site', as used in Article 6(3).

The requirements deriving from the 'precautionary principle' in relation to the Article 6 regime.

In the Section 3.2 to 3.4 below the three central concepts are discussed, based on an analysis of the case law of the ECJ (see Annex 3) and the views expressed by the European Commission in various Guidance documents (see list of references). Next, in Section 3.5 these findings in relation to these terms and concepts have been interconnected and explicitly related to the two dilemmas: what do the Court's case law and guidance documents of the Commission tell us about the space within the Natura 2000-system for addressing the dilemmas?

Creating this legal framework is useful for formulating and selecting questions for studying the approaches in the selected Member States (Chapter 4). From a more critical perspective, it also creates the possibility to assess whether certain best practices or solutions of other Member States are within the limits (minimum requirements) of the legal framework.

3.2 Deterioration

Article 6(2) of the Habitat Directive states that no deterioration in Natura 2000-sites is allowed:

"Member States shall take appropriate steps to avoid, in the special areas of conservation, 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 line with this formulation the case law of the Court of Justice confirms that Article 6(2) has two main components⁹:

- Avoid "the deterioration of natural habitats and the habitats of species".
- Avoid "disturbances of the species for which the special areas of conservation have been designated".

Although the two components are interrelated, for instance, disturbances of the species for which the special areas of conservation have been designated may result from deterioration of the natural habitats of these species, the discussion below focuses on the first component and pays attention to the following issues:

- 1. The character of deterioration
- 2. Causes of deterioration
- 3. Deterioration and the relationship with the site's conservation objectives
- 4. Reference state for determining deterioration and space for ecological dynamics

C-508/04, Com-Austria, para. 98-100. See also C-404/09, Com-Spain, para. 76-78.

3.2.1 The character of deterioration

The Commission has explained in 2000 that deterioration is "a physical degradation of a habitat" (European Communities, 2000) and that it can be assessed by a decrease in area or a change in the characteristics of the habitat. As will be explained in more detail below, deterioration should be assessed against the objectives of the directive (ibid.). The Court of Justice makes explicit that the obligation to prevent deterioration has a permanent (continuing) character, which distinguishes it from the obligation under Article 6(3) that focuses on assessments of plans and projects 10. Also the European Commission has underlined in 2000 that the obligation "applies permanently in the special areas of conservation" (European Communities, 2000).

Furthermore, the scope of Article 6(2) is broader than Article 6(3) and 6(4) as Article 6(2) also prohibits deterioration and significant disturbance by other causes than 'plans and projects'. Examples may include the deterioration of habitats due to activities such as hunting 11, a lack of good air quality (for instance as a consequence of emissions from intensive traffic), etc. The scope of Article 6(2) is even not limited to human induced deterioration (see below).

As far as the relationship between Article 6(2) and Article 6(3)(4) is concerned, Article 6(2) does not apply to those impacts that have been assessed and allowed in accordance with Article 6(3) and/or 6(4), but does apply:

- · If the actual impacts of an assessed and authorised plan or project differs from the appropriate assessment¹²;
- Plans and projects that have been authorised without an appropriate assessment before the site has been placed on the 'list of sites of community importance' (this may require authorities to conduct an ex-post assessment of the impacts of such a plans or projects to ensure consistency with Article $6(2))^{13}$.

While Article 6(2) only relate to the species and habitats located in the Natura 2000-site, the Commission explains that "measures may need to be implemented outside the SAC", i.e. if external events may have an impact on the species and the habitats inside the area (European Communities, 2000). It is also clear from the Court's case law that Article 6(2) may require not only measures to prevent deterioration and significant disturbance, but - depending on the circumstances - also "positive measures to preserve or improve the state of the area". 14

"59. Moreover, the protection of SPAs is not to be limited to measures intended to avoid external anthropogenic impairment and disturbance but must also, according to the situation that presents itself, include positive measures to preserve or improve the state of the site (see, to this effect, Case C-418/04 Commission v Ireland, paragraph 154)."15

Such an obligation to take positive measures may have far-reaching practical consequences, as these measures may, for instance, include the removal of an alien species that constitutes a threat to the Natura 2000 species for which the area qualifies. 16

As the 'threshold' of deterioration is concerned, the European Commission explains that for 'disturbance' to be in violation with Article 6(2), it must be 'significant' ("a certain degree of disturbance is tolerated"), while, according to the Commission "[i]n the case of deterioration, the legislator did not explicitly give this margin (European Communities, 2000)." While we have not found a clear judgment of the Court on this issue, the Commission's view has been confirmed by AG Kokott in 2009 in her Opinion in case C-241/08: "[...] Article 6(2) of the Habitats Directive prohibits any kind

¹² C-127/02 (Waddensea), para. 37.

 $^{^{\}rm 10}$ C-399/14, Gruna Liga Sachsen v. Freistaat Sachsen, para. 37.

¹¹ C-241/08, Com. vs France

 $^{^{\}rm 13}$ C-399/14, Gruna Liga Sachsen v. Freistaat Sachsen, para. 43.

¹⁴ C-418/04, (Com. v. Ireland), 13 December 2007, para. 154.

¹⁵ C-535/07, (Com. v. Austria), 14 October 2010, para. 59.

¹⁶ Ibid., para. 87. This case related to Art. 4(4) Birds Directive, but Art. 6(2) Habitats Directive may also require positive measures. See C-535/07, (Com. v. Austria), 14 October 2010, paras 58-59.

of deterioration of natural habitats and the habitats of species and only includes a restriction to significant effects in relation to disturbance of species." 17

3.2.2 Causes of deterioration

Article 6(2) requires Member States to avoid all types of man-caused deterioration and the European Commission explains that this may "concern past, present and future activities or events" (European Commission, 2000). The moment in time on which activities were undertaken is not relevant as the obligation focuses on the deteriorating effects that must be avoided. If these effects derive from activities or events from the past (e.g., a toxic spill), Article 6(2) may also apply. 18 Furthermore, the obligation applies to effects deriving from intentional as well as unintentional acts. ¹⁹ The Court of Justice has even made clear that Article 6(2) also applies to deterioration by natural causes:

"It is clear that, in implementing Article 6(2) of the Habitats Directive, it may be necessary to adopt both measures intended to avoid external man-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in SACs to deteriorate."20

Deterioration and the relationship with the site's conservation objectives

In respect of significant disturbance, the Court of Justice has made clear that an activity must be considered to be in conformity with Article 6(2) "only if it is guaranteed that it will not cause any disturbance likely significantly to affect the objectives of that directive, particularly its conservation objectives." ²¹ Similarly, the prohibition of deterioration of habitats relates to habitats that are relevant from the perspective of the Natura 2000-objectives: Annex I natural habitat types and the habitats of Natura 2000 species (including Bird species of Annex I and article 4.2 of the Birds Directive) for which a certain Natura 2000-site has been designated.²²

The European Commission also highlights the relationship between Article 6(2) and the habitat types and species for which the site has been designated, but the Commission's guidance documents do not clearly distinguish between the species and habitat types mentioned on the Standard Data Form, the species and habitat types for which a site was selected and the species and habitat types for which a site was has been designated. In 2000 it seems that the Commission assumes these to be identical:

"The appropriate measures concern only habitats and species 'for which the areas have been designated'. In particular, the habitats and species concerned by the measures to be taken are those identified in the Natura 2000 standard data forms. The aim is not therefore to take general conservation measures, but rather to take measures focused on the species and habitats which justified the selection of the special area of conservation. The disturbances and/or deterioration will thus be determined by the information which has been communicated by the Member States and which has been used to ensure the coherence of the network for the species and habitats

In 2000, the Commission explained that in determining whether deterioration takes place, "the Member State has to take into consideration all the influences on the environment hosting the habitats (space, water, air, soils). If these influences result in making the conservation status of the habitat

¹⁹ Ibid.

 $^{^{\}rm 17}$ Opinion AG Kokott in case C-241/08, Com. vs France, 25 June 2009, para. 20.

¹⁸ Ibid.

²⁰ Case C-6/04, Com-UK, (Gibraltar).

²¹ C-141/14, Com-Bulgaria, para. 56. See also C-404/09, Com-Spanje, para. 126. See also the conclusion of AG N. Wahl in relation to case C-461/14, Com-Spanje, 23 Feb 2016, para. 84.

C-127/02 (Waddensea), answer to the second question. Whether the prohibition also relates to other Natura 2000habitats for which the site has not been designated is not fully clear. The examples in the case law of the Court of Justice often explicitly refer to the habitats of species for which the site has been designated. For instance, in applying Art. 6(2) to areas designated under the Birds Directive attention focuses on the likeliness of impacts or risks to habitats of bird species for which the areas has been designated. However, in view of the general reference to the objectives of the directive in the above quotation of the Court of Justice, one could advocate that the prohibition of deterioration relates to all natural habitats of Annex I and the habitats of all Natura 2000 species that are to be found in the Natura 2000 area. See C-127/02 (Waddensea), answer to the second question, but for instance also Opinion AG Kokott in case C-241/08, Com. vs France, 25 June 2009, paras 21-28.

less favourable than it was before, the deterioration can be considered to have occurred" (European Communities, 2000). As a next step, the Commission works out the term deterioration in more detail by referring to the factors that are relevant in determining the 'favourable conservation status of a natural habitat': the "natural range and areas it covers within that range are stable or increasing", "the specific structure and functions of the area necessary for its long-term maintenance exist and are likely to continue to exist in the foreseeable future", and "the conservation status of its typical species is favourable as defined in (i)". This means, for instance, that: "Any event which contributes to the reduction of the areas covered by a natural habitat for which this site has been designated can be regarded as deterioration" and "[a]ny impairment of the factors necessary for the long-term maintenance of the habitats can be regarded as deterioration " (European Communities, 2000).

3.2.3 3.2.4. Reference state for determining deterioration and space for ecological dynamics

There is no case law of the CJEU that makes clear what the reference for deterioration is, however, in 2011 the Commission stated:

"The conservation status at the date of designation of the site should be used as a reference value for evaluating its deterioration (art. 6.2). In this context, gains made as a result of restorative measures taken or other improvements e.g. bird population increases, due to pressure elsewhere or response to climate change, as well as losses caused by natural developments or climate change also need consideration. The site's Standard Data Form (SDF) remains an important reference document with this regard " (European Commission, 2011).

The first sentence of this quotation appears to strongly emphasise the conservation of existing Natura 2000 habitats and directly touches upon the question of how to deal with Natura 2000 values that require contradictory ecological requirements and measures and the question whether there is space for ecological dynamics. These questions appear to be even more relevant against the backdrop of the low threshold for determining whether deterioration is caused (not limited to 'significant' deterioration; see above). However, the other sentences of the above quotation indicate that deterioration is not just about conservation of existing natural values. Even the reference to the SDFs leaves room for changes as SDFs should also be up-dated.

The Commission seems to accept "some room for manoeuvre in determining what can be described as deterioration" (European Commission, 2011), which 'room for manoeuvre' must be sought in the relation between the term deterioration and the objectives of the directive. The Commission states:

"The purpose of all the measures taken under this directive has to correspond to the objectives of the directive and to respect the principle of proportionality. The deterioration of habitats is therefore also to be assessed against the objectives of the directive. Indeed, it seems difficult to assess deterioration in absolute terms without reference to measurable limits. [...] connecting deterioration to the objectives of the directive makes it possible to use Article 1 of the directive to interpret the limits of what one can regard as deterioration" (European Communities, 2000).

Along this line of reasoning, the Commission connects the term deterioration with the concept of conservation status. More recently, the Commission has explained this more explicitly in the context of wilderness management in Natura 2000 sites. In the 2013 guidelines on this issue, the Commission has clearly indicated that in some situations natural processes may connect well with the Natura 2000regime:

"Natural fluctuations at the individual site level following natural processes fit well within the Natura 2000 requirements, even if the area of some habitats types may locally and temporarily decrease and while other habitats may develop or improve as a result of the same natural processes. Therefore, the maintenance of the dynamic complexes of habitats, such as those in wilderness areas influenced only by natural processes with natural fluctuations, can be an appropriate conservation objective for particular Natura 2000 sites, provided FCS at regional, national or biogeographical level is guaranteed. Evidently, processes leading to a degradation of natural habitat types due to anthropogenic processes are not permitted" (European Commission, 2013 p.44-45).

It should not be concluded from this paragraph that active management is only needed to prevent deterioration caused by anthropogenic processes. In the same guidance document the European Commission emphasises that "preservation of wilderness qualities does not mean inaction" and that also wilderness management requires management measures (European Commission, 2013, p. 47). Examples include action to respond to the outbreak of diseases or the spread of invasive alien species, but also possible zoning measures to prevent negative impacts caused by wilderness related recreation, etc. Furthermore, wilderness management may work in large sites with well-functioning ecological processes (relatively complete ecosystems), but not in smaller sites or in sites where the appearance of habitat types and species is related to historic or present human interventions in nature and particular forms of human use of these sites. The Commission explains that "[i]n many Natura 2000 sites, non-intervention management or a set-aside approach may conflict with the ecological requirements of species or habitats of Community interest" and mentions specifically "[h]abitat types and species linked to traditional land-use practices, such as livestock grazing, hay-making, reed cutting, and wood-logging (coppice)." (European Commission, 2013, p. 45). The Commission states that a "list of 63 habitat types dependent on agricultural activities has been identified in the Annex II to the EU Biodiversity baseline" and that "nearly 40 bird species and nearly 30 other species of Community interest are linked to agro-ecosystems." (European Commission, 2013, p. 46). Consequently, the Commission stresses that Natura 2000 sites that are based on such agro-ecosystems (38% of the total surface of the Natura 2000-network) "are not usually suitable for the introduction [of, sic] wilderness and instead continued low intensity agriculture, in those parts where the secondary habitat types occur, is normally the adequate management approach." (European Commission, 2013, p. 46).

This discussion underlines that the term deterioration must be interpreted against the background of the objectives of the directives, as well as the conservation objectives of the relevant Natura 2000sties. In view of the central role of these conservation objectives of Natura 2000 sites in the Article 6 regime, room for ecological dynamics within the Natura 2000-regime may be established by anticipating certain changes in these objectives. The Court of Justice has not had the chance yet to shed some light on this issue. However, Advocate General Kokott has discussed the issue of Natura 2000 values within one site that would require conflicting management efforts and indeed explains that such conflicts may be resolved when setting the conservation objectives:

"measures which are appropriate and necessary in order to achieve the conservation objectives cannot in principle be regarded as deterioration of the site within the meaning of Article 6(2) of the Habitats Directive. If certain conservation objectives conflict with one another in the sense that the conservation measures required for one objective adversely affect the achievement of another objective, then this conflict must be resolved in the context of defining these objectives." ²³

Most likely the option of setting such 'in favour of' objectives may only be used in those situations where choices between various objectives cannot be avoided through alternative management approaches. If objectives of all relevant Natura 2000 habitat types and species can be achieved, for instance by ensuring that the site is large enough or through the application of different management approaches in different zones of the site, 'in favour of'-objective will not justify the deterioration of certain Natura 2000 values.

 $^{^{23}}$ Opinion AG Kokott in case C-241/08, Com. vs France, 25 June 2009, para. 43.

Kokott continues by stating that Member States have the competence to set priorities in formulating conservation objectives in light of the objective of the directives and certain other factors:

"The Court has already decided that, as is apparent from Article 3 and Article 4 of the Habitats Directive and in particular Article 4(4), the conservation objectives may be determined in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed. Therefore, if necessary, these objectives have to be weighed up against one another and priorities have to be established."24

Kokott explains that "while this very complex decision requires a broad margin of discretion for the competent authorities, it is not completely immune to review by the courts". 25 However, what the boundaries of this margin of discretion are is yet unclear. A particularly difficult issue is whether a certain species or habitat type for which a site has been selected and designated may completely disappear due to conflicting objectives and/or ecological processes. The Commission's view that deterioration should be interpreted in light of the directives' objectives indicates that the disappearance of a species or habitat type in a certain Natura 2000 site may be considered less problematic if it is ensured that the favourable conservation status of that species or habitat at national level is maintained or restored (Bastmeijer, 2016, pp. 194-195). The Commission appears to confirm this in the wilderness guidelines:

"It may not always be indispensable to maintain each habitat type or species in each site in an optimal condition, but it is necessary to make sure that the conservation status of the habitats and species of Community interest will certainly not decrease but in the contrary, will maintain or achieve a favourable level at the appropriate regional or national level. Local fluctuations as a result of natural processes at the site level are therefore acceptable, provided the FCS status at the national and biogeographical level is ensured" (European Commission, 2013).

However, this is certainly still an open issue and we will have to wait for the Court's participation in this debate. In view of the Gibraltar-case it may well be that the Court takes a more strict approach and will emphasise the importance of taking all possible measures to prevent habitat types and species of Community interest from disappearing from a Natura 2000-site.

3.3 Integrity of the Site

According to the second sentence of Article 6(3) "the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned [...]." The terminology 'integrity of the site' has not been defined in the Habitats Directive, but the Guidance document on Article 6, the Commission explains:

 $^{^{24}}$ Opinion AG Kokott in case C-241/08, Com. vs France, 25 June 2009, para. 44.

²⁵ Ibid., para. 44.

"The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives" (European Commission, 2000)²⁶.

This guidance explains on the one hand that plans or project can only adversely affect the integrity of the site if they concern habitat types and species listed in Annex I or Annex II. On the other hand the document describes integrity in a more holistic way or dynamic ecological context, defining integrity as having the sense of resilience and the ability to evolve in ways that are favourable to conservation. So combining the focus on Natura 2000 habitats with a holistic approach means that - similarly to 'deterioration' - impacts on the integrity of the site include direct impacts on species and habitat types for which the site has been designated as well as to more indirect effects and cumulative effects, for instance, through negative effects on the characteristics of the ecosystem that makes the site so well fitted for hosting the habitat types and species for which the site has been designated. This sounds logical but - as we have also discussed in relation to the term 'deterioration' - there may be tensions between the emphasis on the ecosystem approach and the focus on specific habitat types and species, particularly if an ecosystem approach would result in negative effects or even the disappearance of such specific habitat types or species. This makes a further investigation of the terminology 'integrity of the site' relevant for this study. This subsection aims to provide more clarity on the meaning of 'integrity of the site' through discussions of the following issues:

- 1. Ecosystem approach
- 2. Characteristics of the site that makes the site fitted for the qualifying Nature 2000 species and habitat types
- 3. Are ecological dynamics part of the 'integrity of a site'?
- 4. For which habitat types and species a site must be designated
- 5. Consequences for plans and projects

3.3.1 Ecosystem approach

The European Commission has explained that the integrity of a Natura 2000 site relates to the qualities of the site as an ecological system. In its Guidance document on Article 6, the Commission states

"As regards the connotation or meaning of 'integrity', this can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation. The 'integrity of the site' has been usefully defined as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified" (European Commission, 2000).

Also Advocate General Sharpston takes this view in her opinion in the Sweetman case. She compares the various language versions of the terminology used in Article 6(3) and concludes in relation to the term 'integrity' "must be understood as referring to the continued wholeness and the soundness of the constitutive characteristics of the site concerned"²⁷.

3.3.2 Characteristics of the site that make the site fitted for the qualifying Nature 2000 species and habitat types

While the wholeness of a site's ecosystem should be acknowledged as being important in understanding the site's 'integrity', not all natural values that may be found in a Natura 2000 site should automatically be considered relevant for the term 'integrity of the site' and therefor for the operation of the Article 6 regime. There has to be a link with the reasons for designating the site as

CJEU Case C-258/11 (Sweetman). Opinion AG Sharpston para. 54.

 $^{^{\}rm 26}$ The quotation used by the Commission derives from a policy document of the United Kingdom.

Natura 2000 site and - consequently - with the conservation objectives of the site. In the Sweetman case, where the discussions focused on a Natura 2000 habitat type, the AG explains this as follows:

"55. The integrity that is to be preserved must be that 'of the site'. In the context of a natural habitat site, that means a site which has been designated having regard to the need to maintain the habitat in question at (or to restore it to) a favourable conservation status. That will be particularly important where, as in the present case, the site in question is a priority natural habitat. 56. It follows that the constitutive characteristics of the site that will be relevant are those in respect of which the site was designated and their associated conservation objectives. Thus, in determining whether the integrity of the site is affected, the essential question the decision-maker must ask is 'why was this particular site designated and what are its conservation objectives?'. [...]"²⁸

This interpretation is in line with the reasoning of the European Commission that the integrity of the site is reflected by its ecological functions:

"A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realized, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required. When looking at the 'integrity of the site', it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and longterm. The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

In the Sweetman case, the Court is on the same page as the AG and – as it appears - the Commission. The Court 'connects' the aspect of 'wholeness' of a site with the conservation objectives of that site by concluding that the characteristics of a Natura 2000-site are connected to the presence of natural habitats which were reason to select the site:

"39. Consequently, it should be inferred that in order for the integrity of a site as a natural habitat not to be adversely affected for the purposes of the second sentence of Article 6(3) of the Habitats Directive the site needs to be preserved at a favourable conservation status; this entails, as the Advocate General has observed in points 54 to 56 of her Opinion, the lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site in the list of SCIs, in accordance with the directive."

The Court has repeated this statement in several more recent judgments, such as the judgments in the Briels case and the Orleans case.

3.3.3 Are ecological dynamics part of the 'integrity of a site'?

There may be tensions between the above discussed emphasis on the ecosystem approach and the focus on specific habitats and species. On the one hand, the Commission emphasizes ecological dynamics as a characteristic of a whole and complete ecosystem and therefor as a component of the integrity of a site:

²⁸ Opinion of Advocate General Sharpston, C-258/11 (Sweetman), 22 November 2012, para. 55 and 56.

"As regards the connotation or meaning of 'integrity', this can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation" (European Communities, 2000).

[...]

A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required" (European Communities, 2000).

This connects well with the Court's case law in relation to the relevance of the 'natural boundaries' of ecosystems in the context of selecting and defining Natura 2000 sites. For instance, in relation to Birds Directives SPAs, the Court has ruled:

"The Commission is therefore correct in claiming, first, that SPA classification cannot be the result of an isolated study of the ornithological value of each of the areas in question but must be carried out in the light of the natural boundaries of the wetland ecosystem and, second, that the ornithological criteria which form the foundation of the classification must have a scientific basis. The use of flawed, allegedly ornithological criteria might lead to an incorrect demarcation of the boundaries of SPAs"²⁹ (see also Bijlsma et al., 2012).

On the other hand, the Commission emphasizes the focus on the conservation objectives of the specific site: "The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives" (European Commission, 2000). This focus on the site's integrity also implies a strict interpretation of the term deterioration, as also explained above "the expression 'integrity of the site' shows that focus is here on the specific site. Thus, it is not allowed to destroy a site or part of it on the basis that the conservation status of the habitat types and species it hosts will anyway remain favourable within the European territory of the Member State" (European Commission, 2000).

3.3.4 For which habitat types and species a site must be designated

As the integrity of the site relates to the characteristics of the ecosystem of habitat types and species for which the site has been designated, the question is how much discretionary competence Member States have in respect of the decision for what habitat types and species a site is designated. This is an important issue as this directly influences the scope of 'integrity of the site' as explained above. For instance, if a Member State would have the competence to only designate a site for a selection of Natura 2000-species and habitat types (for instance because these are considered to be typical components of a certain type of ecosystem), it could substantially limit the legal consequences of Article 6 for plans and projects.

In relation to the Birds Directive, the Court has made clear in 2010 that the implementation system must ensure sufficient clarity and legal force in respect of the species for which a site has been designated:

 $^{^{\}rm 29}$ HvJ EG, 13 december 2007 (Com vs Ireland), C-418/04, r.o. 142.

"64. As regards identification of the protected species and habitats in each SPA, just as the delimitation of a SPA must be invested with unquestionable binding force (see Commission v Belgium, paragraph 22), the identification of the species which have warranted classification of that SPA must satisfy the same requirement. If that were not the case, the protective objective arising from Article 4(1) and (2) of the Birds Directive and from Article 6(2), read in conjunction with Article 7, of the Habitats Directive might not be fully attained."³⁰

It may be assumed that this also applies to the designation of sites under the Habitats Directive as clarity on the issue for which species and habitat types a site has been designated is important for the well-functioning of the Article 6 regime as well as for the legal certainty of citizens in relation to the consequences of the regime.³¹

The question of whether Member States have a discretionary competence to make choices in respect of the species and habitat types for which the site is designated has received specific attention of the European Commission. In a 2012 Note on the domestic designation of SACs, the Commission explains that a site must be designated for all species and habitat types with a presence that is more than 'non-significant' according to the Standard Data Form:

"In order to provide the necessary legal clarity, the SAC designation act must, in addition to providing the name and location of the site, be clear and legally transparent about: - Species and habitat types for which the SAC is designated: for instance, by listing - either in the act itself or in a separate legally binding document - all the species of Annex II and habitat types of Annex I significantly present in each site, (i.e. all species indicated in the Standard Data Form (SDF) as having a significant population size and density in relation to the populations present within the national territory (population size category A, B or C) and all habitat types indicated in the SDF as having an excellent (A), good (B) or significant (C) representativity" (European Commission, 2012 pp. 4).

Recently, the European Commission has explicitly confirmed this in a letter to the Dutch Ministry of Economic Affairs (Letter of Nicola Notaro, 2015). The text in this letter also implies that for all these significantly present Annex I habitats and Annex II species conservation objectives must be formulated.

While the competence to leave out Annex I habitat types and Annex II species from the Natura 2000 designation and the scope of the 'integrity of the site' is limited to those species and habitat types whose presence is considered non-significant, the European Commission has confirmed in the above mentioned documents (the Note as well as the letter) that priorities may be set through the conservation objectives for the site.

3.3.5 Consequences for plans and projects

This above discussed greater clarity on the meaning of 'integrity of the site' provides more clarity on the consequences of Article 6(3) for plans and projects and particularly the space for competent authorities to authorize such plans and projects. "Article 6(3) of the Habitats Directive establishes an assessment procedure intended to ensure, by means of a prior examination, that a plan or project not directly connected with or necessary to the management of the site concerned but likely to have a significant effect on it is authorized only to the extent that it will not adversely affect the integrity of that site"32.

 $^{^{30}}$ C-535/07, (Com. v. Austria), 14 October 2010, para. 64.

In this context, one could also refer to the general requirements in relation of clear and precise implementation of EU directives: "In that regard, it is important to recall that, according to consistent case-law, the provisions of directives must be implemented with unquestionable binding force, and the specificity, precision and clarity necessary to satisfy the requirements of legal certainty (see, in particular, Case C-159/99 Commission v Italy [2001] ECR I-4007, paragraph 32)." See C-415/01, 27 February 2003, paras 21 en 22.

 $^{^{32}}$ C-521/12 (Briels), para. 21 and Case C-387/15 (Orleans), 21 July 2016, para. 43.

Below we will discuss that the application of the precautionary principle in this context "requires the competent national authority to assess the implications of the project for the site concerned in view of the site's conservation objectives and taking into account the protective measures forming part of that project aimed at avoiding or reducing any direct adverse effects on the site, in order to ensure that it does not adversely affect the integrity of the site (judgment of 15 May 2014 in Briels and Others, C-521/12, EU:C:2014:330, paragraph 28)."33

3.4 The precautionary principle and Article 6 of the Habitats Directive

According to the Court, the precautionary principle "is one of the foundations of the high level of protection pursued by Community policy on the environment, in accordance with the first subparagraph of Article 174(2) EC, and by reference to which the Habitats Directive must be interpreted."34 The relevance of this principle has recently received substantial attention in the Court's case law in relation to the more specific components of the Natura 2000-regime. In this subsection, the following issues will be discussed:

- 1. The precautionary principle and the question of necessary management measures (Article 6.1) and appropriate steps to avoid deterioration (Article 6.2)
- 2. The precautionary principle and the question whether an appropriate assessment must be made (first stage Article 6(3)
- 3. The precautionary principle and the question whether an authorization for the plan or project may be issued (second stage Article 6(3)
- 4. The precautionary principle and the distinction between mitigation and compensation (Article 6(3) and 6(4))

3.4.1 The Precautionary Principle and Article 6(1) and 6(2)

Discussions on the necessity of interpretation in accordance with the precautionary principle has often been stressed in relation to Article 6(3) of the Habitats Directive (see below), however, the principle must also be respected when implementing the other paragraphs of Article 6. For instance, in relation to management measures under Article 6(1), the European Commission has explained that gaps in knowledge may require additional research:

"Where uncertainties or lack of knowledge on physical, morphological or biological processes still exist, these should be minimized as far as possible by additional research; where uncertainty remains adaptive monitoring programmes should be foreseen. New evidence and scientific information should be fed back into the management plan and where necessary lead to an appropriate adaptation of the management measures and monitoring schemes"(European Commission, 2011 p. 18).

The importance of the precautionary principles has also been reflected in the case law of the Court of Justice in relation to Article 6(2) of the Habitats Directive. For example in the Alto Sil case, the Court of Justice explained that the Commission does not have to prove a cause and effect relationship in order to establish a breach of Article 6(2):

C-521/12 (Briels), para. 21 and Case C-387/15 (Orleans), 21 July 2016, para. 54.

C-418/04, Com-Ireland, para. 254. See also Opinion of Advocate General Kokott, C-404/09, Com-Spain, para. 40: "The Habitats Directive must be interpreted by reference to that principle."

"140. The Kingdom of Spain expresses doubts in that regard by objecting that the decline in the populations of that species, including on the 'Alto Sil' site, has also been observed outside the mining basin and is even more marked there. That was confirmed by the 2005 report, which indicates that there is no relation of cause and effect between the existence of mining operations and the abandonment of breeding grounds by the Cantabrian capercaillie, that latter phenomenon being more significant in areas beyond those neighbouring the operations.

141. However, that circumstance in itself does not prevent the said nuisances produced inside the SPA by the mining operations in question from being capable of having had significant impacts on that species, even if the decline of that species may have been greater yet for populations relatively distant from those operations.

142. Moreover, in order to establish a failure to fulfil obligations within the meaning of Article 6(2) of the Habitats Directive, the Commission does not have to prove a cause and effect relationship between a mining operation and significant disturbance to the capercaillie. Since Article 6(2) and (3) of the Habitats Directive are designed to ensure the same level of protection, it is sufficient for the Commission to establish the existence of a probability or risk that that operation might cause significant disturbances for that species." 35

The Court re-affirms this interpretation in the recent judgement in case C-141/14. While a complaint of violation of Article 6(2) is only well founded "if the Commission demonstrates to a sufficient legal standard that the Republic of Bulgaria has not taken the appropriate protective measures", 36 it is not necessary to proof a full causal link between cause and effect:

"None the less, in order to establish failure to fulfil obligations under Article 6(2) of the Habitats Directive, the Commission does not have to establish the existence of a cause-and-effect relationship between the operation of installations resulting from a project and significant disturbance caused to the species concerned. It is sufficient for the Commission to establish that there is a probability or risk that that operation might cause such disturbances."37

3.4.2 The precautionary principle and the question of whether an appropriate assessment must be made

In respect of the first stage of Article 6(3) – the decision whether an appropriate assessment must be made - the Court explains in the Waddensea case (C-127-02) that an appropriate assessment is required if - on the basis of objective information - individual or cumulative significant effects cannot be excluded:

"43. It follows that the first sentence of Article 6(3) of the Habitats Directive subordinates the requirement for an appropriate assessment of the implications of a plan or project to the condition that there be a probability or a risk that the latter will have significant effects on the site concerned. 44. In the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment, in accordance with the first subparagraph of Article 174(2) EC, and by reference to which the Habitats Directive must be interpreted, such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned (see, by analogy, inter alia Case C-180/96 United Kingdom v Commission [1998] ECR I-2265, paragraphs 50, 105 and 107). Such an interpretation of the condition to which the assessment of the implications of a plan or project for a specific site is subject, which implies that in case of doubt as to the absence of significant effects such an assessment must be carried out, makes it possible to ensure effectively that plans or projects which adversely affect the integrity of the site concerned are not authorized, and thereby contributes to achieving, in accordance with the third recital in the preamble to the Habitats

C-404/09, Com-Spain, para. 140-142. See also concl. AG N. Wahl, case C-461/14, Com-Spain, 23 Feb 2016, para. 84. See also more recent C-141/14, Com-Bulgaria, (no para.numbering).

C-141/14, Com-Bulgaria, para. 57.

³⁷ Ibid. para. 58. The Court refers to C-404/09, Com-Spain, para. 142. See also the Opinion of Advocate General Wahl in relation to Case C-461/14, Com-Spain, 23 February 2016, para. 84.

Directive and Article 2(1) thereof, its main aim, namely, ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora.

45. In the light of the foregoing, the answer [...] must be that the first sentence of Article 6(3) of the Habitats Directive must be interpreted as meaning that any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects."38

The precautionary principle therefore requires a low threshold for determining whether an appropriate assessment is required. In his Opinion for the Sweetman case, Advocate General Sharpston explains this as follows:

"It follows that the possibility of there being a significant effect on the site will generate the need for an appropriate assessment for the purposes of Article 6(3). [...] The threshold at the first stage of Article 6(3) is thus a very low one. It operates merely as a trigger, in order to determine whether an appropriate assessment must be undertaken of the implications of the plan or project for the conservation objectives of the site."39

This line of reasoning has also played an important role in addressing other questions in relation to this first stage of Article 6(3). For instance, it plays an explicit role in the Court's judgement that "a Member State may not, [...] 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."⁴⁰

3.4.3 The precautionary principle and the question whether an authorization for the plan or project may be issued

The precautionary principle also plays an important role in the second stage of Article 6(3): the stage of determining whether an authorization for the plan or project may be issued. As explained by the Court in the Waddensea case the competent authorities may only authorize the plan or project if no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of that site:

"56. It is therefore apparent that the plan or project in question may be granted authorisation only on the condition that the competent national authorities are convinced that it will not adversely affect the integrity of the site concerned.

57. So, where doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority will have to refuse authorisation. 58. In this respect, it is clear that the authorisation criterion laid down in the second sentence of Article 6(3) of the Habitats Directive integrates the precautionary principle (see Case C-157/96 National Farmers' Union and Others [1998] ECR I-2211, paragraph 63) and makes it possible effectively to prevent adverse effects on the integrity of protected sites as the result of the plans or projects being considered. A less stringent authorisation criterion than that in question could not as effectively ensure the fulfilment of the objective of site protection intended under that provision. 59. Therefore, pursuant to Article 6(3) of the Habitats Directive, the competent national authorities, taking account of the conclusions of the appropriate assessment of the implications of mechanical cockle fishing for the site concerned, in the light of the site's conservation objectives, are to authorise such activity only if they have made certain that it will not adversely affect the integrity of

⁴⁰ C-538/09, Com-Belgium, para. 45.

C-127/02 (Waddensea), paras 43-45.

Opinion of Advocate General Sharpston, C-258/11 (Sweetman), paras 47 and 49.

that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects (see, by analogy, Case C-236/01 Monsanto Agricoltura Italia and Others [2003] ECR I-0000, paragraphs 106 and 113)."41

Thus, as explained by the Advocate General Sharpston in her Opinion for the Sweetman case, "the threshold laid down at this stage of Article 6(3) may not be set too high, since the assessment must be undertaken having rigorous regard to the precautionary principle."⁴² With a reference to the above paragraphs of the Waddensea judgment of the Court, she states that the "competent national authorities may grant authorisation to a plan or project only if they are convinced that it will not adversely affect the integrity of the site concerned. If doubt remains as to the absence of adverse effects, they must refuse authorization" (italic in original). ⁴³ She also explains that at least "[a]n effect which is permanent or long lasting must be regarded as an adverse one" and that "[i]n reaching such a determination, the precautionary principle will apply."44

It is clear from the Court's case law that this threshold for the competent authority to be able to authorize a plan or project implies also strict requirements for the appropriate assessment on which such a decision should be built. For instance, in the case in which an Italian authorization for ski facilities were challenged, the assessment was clearly below the required standard as it could not remove "all reasonable scientific doubt" regarding the negative effects for the conservation objectives:

"It follows from all the foregoing that both the study of 2000 and the report of 2002 have gaps and lack complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the SPA concerned. Such findings and conclusions were essential in order that the competent authorities might gain the necessary level of certainty to take the decision to authorise the works". 45

3.4.4 The distinction between mitigation and compensation and the Precautionary Principle

More recently, the precautionary principle has also played a role in the discussions on the distinction between mitigation under 6(3) and compensation under 6(4) of the Habitats Directive. In her Opinion for the Briels case, Advocate General Sharpston explains that anticipating on future ecological restoration measures when making an appropriate assessment would not be in conformity with the precautionary principle:

⁴¹ C-127/02 (Waddensea), paras 56-59. See also CoJEU, Case C-258/11 (Sweetman), 11 April 2013, para. 28.

Opinion of Advocate General Sharpston, C-258/11 (Sweetman), para. 51.

⁴³ Opinion of Advocate General Sharpston, C-258/11 (Sweetman), para. 51. Opinion of Advocate General Sharpston, C-258/11 (Sweetman), para. 76.

⁴⁵ Case C-304/05, *Commission* v *Italy*, paragraphs 46 – 73. See for - to a certain extend contrasting views - European Commission, 'EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones', Luxembourg, 2011, p. 33.

"Indeed, [...] there can be no certainty that steps to create a new area of a particular habitat will in fact ever achieve the desired outcome and, in application of the precautionary principle, absence of uncertainty is a condition for approval in the context of Article 6(3) of the Habitats Directive. Outcomes cannot be guaranteed in heavily-managed agriculture; it is all the more difficult to quarantee them when seeking to encourage nature to take its course. The Court has stated that there must be no remaining scientific doubt before it can be concluded that there are no lasting adverse effects on the integrity of a site. The same standard must in my view be applied to predictions of success for planned new areas of created 'natural' habitat." 46

In line with this reasoning of the Advocate General, the Court confirms in this case the obligation of the competent authorities within the decision if they will or will not agree on a plant or project: "the application of the precautionary principle in the context of the implementation of Article 6(3) of the Habitats Directive requires the competent national authority to assess the implications of the project for the Natura 2000 site concerned in view of the site's conservation objectives and taking into account the protective measures forming part of that project aimed at avoiding or reducing any direct adverse effects for the site, in order to ensure that it does not adversely affect the integrity of the site." This results in more clarity on the distinction between mitigating measures under Article 6(3) and compensating measures as meant in Article 6(4), the latter being the creation of a new area within affected Natura 2000-site:

"Consequently, it follows from the foregoing considerations that Article 6(3) of the Habitats Directive must be interpreted as meaning that a plan or project not directly connected with or necessary to the management of a site of Community importance, which has negative implications for a type of natural habitat present thereon and which provides for the creation of an area of equal or greater size of the same natural habitat type within the same site, has an effect on the integrity of that site. Such measures can be categorized as 'compensatory measures' within the meaning of Article 6(4) only if the conditions laid down therein are satisfied."⁴⁸

In the more recent Orleans case, the Court admits that "the circumstances are not identical to those in the case that gave rise to the judgment of 15 May 2014 in Briels and Others [...] since the measures envisaged in the former cases must be completed before the adverse effects, whereas in the latter case, the measures were to be completed subsequently to such effects". 49 So, while the order of positive and negative influences is certainly more in favor of the conservation objectives of the site, in the Orleans case the appropriate assessment under Article 6(3) would still be conducted before the full and complete establishment of the positive measures. The Court considers this in violation with the Court's case-law that "emphasizes the fact that the assessment carried out under Article 6(3) of the Habitats Directive may not have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned."⁵⁰

As the Advocate General explained in her opinion for the Briels case, in the Orleans case the Court stressed that the positive effects of human measures will never by 100% certain:

⁴⁹ Case C-521/12 (Briels), para. 21 and Case C-387/15 (Orleans), para. 49.

 $^{^{\}rm 46}$ Opinion of Advocate General Sharpston, C-521/12 (Briels), para. 42.

⁴⁷ C-521/12 (Briels), para. 28.

⁴⁸ Ibid. 39.

⁵⁰ Ibid. 50.

"as a rule, any positive effects of a future creation of a new habitat, which is aimed at compensating for the loss of area and quality of that same habitat type on 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 (see, to that effect, judgment of 15 May 2014 in Briels and Others, C-521/12, EU:C:2014:330, paragraph 32)." 51

In this light, the Court explains that "Article 6(3) of the Habitats Directive also integrates the precautionary principle", 52 and that "the adverse effects on the Natura 2000 site in question are certain" while "the benefits resulting from the creation of the nature reserves have already been taken into account in the assessment and in demonstrating the absence of significant adverse effects on the site even though the result of the creation of those reserves is uncertain, since it is not complete."53 From the perspective of the precautionary principles, this makes the approaches taken by the authorities in the Briels case and Orleans case both problematic:

"the circumstances of the cases in the main proceedings and those that gave rise to the judgment of 15 May 2014 in Briels and Others (C-521/12, EU:C:2014:330) are similar in so far as they involve, at the time of assessing the implications of the plan or project for the site concerned, the identical premise that future benefits will mitigate the significant adverse effects on that site, even though the development measures in question have not been completed." 54

Consequently, as in the Briels case, the positive measures could (if the relevant conditions are met) be considered as 'compensatory measures' under Article 6(4) of the Habitats Directive, but not as mitigation measures in the context of Article 6(3).

Thus, while the regime of Article 6 of the Habitats Directive does not include an explicit reference to the precautionary principle, the principle is imbedded in its components and the discussions clearly show that the principle plays an important role in interpreting the regime's components by the Court of Justice. In more recent EU legislation in the field of nature conservation, the principle has been mentioned more explicitly. In the Regulation (EU) Nr. 1143/2014 "on the prevention and management of the introduction and spread of invasive alien species". The preamble of the directive states in paragraph 20: "emergency measures at Union level would equip the Union with a mechanism to act swiftly in case of presence or imminent danger of entry of a new invasive alien species in accordance with the precautionary principle." Furthermore, in Article 8(5) the Regulations state in relation to the permit system for derogations from the prohibitions that "[a]ny withdrawal of a permit shall be justified on scientific grounds and, where scientific information is insufficient, on the grounds of the precautionary principle and having due regard to national administrative rules."

The legal framework for approaches to address the 3.5 dilemmas

In this section, we connect the legal framework to the two dilemma's that are central in this research.

⁵¹ Ibid. 52.

⁵² Ibid. 53.

⁵³ Ibid. 55.

⁵⁴ Ibid. 56.

Dilemma 1: Connecting economic development and ecologic restoration

The space within the framework of the Article 6 regime for plans and projects that connect economic development and ecological development depends very much on the order of negative and positive effects and the question which paragraph of Article 6 is being applied.

For the much-debated situations (central to dilemma A) in which - within the framework of Article 6(3) - negative habitat effects of a plan or project are neutralised through ecological restoration elsewhere in the site, the options in case of affected Annex I habitat types are substantially limited as a result of the Briels and Orleans cases. As explained in Chapter 2, "a plan or project not directly connected with or necessary to the management of a site of Community importance, which has negative implications for a type of natural habitat present thereon and which provides for the creation of an area of equal or greater size of the same natural habitat type within the same site, has an effect on the integrity of that site". "[S]uch measures can be categorized as 'compensatory measures' within the meaning of Article 6(4) only if the conditions laid down therein are satisfied" (Briels case, para.40). Furthermore, in such situations, conducting the ecological restoration prior to the cause of negative impacts does not help within the framework of Article 6(3) if at the moment of the appropriate assessment and authorization it is still unsure whether the ecological restoration will be successful (Orleans case, para 56).

This does not mean that the regime of Article 6 does not leave any space for plans and projects that connect economic development and ecological development. Three situations still fall within the requirements of Article 6:

- Prevent the direct impacts of a plan or project (real mitigation) within the framework of Article 6(3).
- Application of Article 6(4).
- Improve win-win approaches for ecology and economy by ensuring that the positive effects of ecological restoration are fully realised before concluding on the appropriate assessment and authorization of a plan or project in the framework of Article 6(3).

These options will receive further attention in the context of the comparative research in the next chapter.

Dilemma 2: Combining an ecosystem approach with existing nature values

As was explained in chapter 2, dynamic processes in Natura 2000 sites could be stimulated by natural (non-intervention) management or by specific restoration projects. When these dynamics result in negative effects for or even the loss of certain habitat types or habitats of species for which a Natura 2000 site has been designated, a dilemma occurs. When applying Article 6 to a Natura 2000 site and therefore interpreting terms such as 'deterioration' and 'integrity of the site', there is a strong focus on the specific habitats and species for which the site has been designated.

However, we may conclude from the detailed analysis of the three terms and concepts that the implementation of the Natura 2000-regime should not simply take one of the two extremes:

- Protecting an area based on free functioning ecological dynamics without any references to specific Natura 2000 habitat types and species.
- Protecting an area solely based on the approach of conserving habitat types and species present in the area without any attention for ecosystem functioning or ecological dynamics.

The extent to which both perspectives may be connected may be further explored in the context of the objectives of the directive and/or the conservation objectives at the level of individual sites. The Court as well as the Commission often relate the interpretation of specific terms and provisions to the these objectives. In view of the objectives of the directives, the two above perspectives and the application of the precautionary approach are logical. In view of the fact that the conservation status of many habitats and species is unfavourable, conservation of existing values is an important starting point, while knowledge of and attention for ecological dynamics is important for ensuring restoration to favourable conservation status and sustainable maintenance of this biodiversity on the longer term. Furthermore, in view of the limited success of biodiversity protection in the past and the unfavourable conservation status of so many habitat types and species, the emphasis on the precautionary principle in interpreting and applying the regime of Article 6 also makes sense.

A balance between conserving existing values, an ecosystem approach and respect for the precautionary approach may be implemented through different approaches of setting conservation objectives, although all these approaches have certain limitations in scope and extent in order to

ensure compliance with the Natura 2000-regime. These approaches include (at the relevant governance levels):

- i. Setting priorities and anticipating ecological dynamics when formulating the conservation objectives for a Natura 2000-site; 55
- ii. Adjusting the system to ecological dynamics through updating the SDFs for sites and the updating of conservation objectives for existing Natura 2000-sites;
- iii. Adjusting the system to ecological dynamics in the overall system of updating the Natura 2000network at the Member State level, for instance, through updating the sites that form part of the Natura 2000 network (the designation of new Natura 2000-sites and deletion of existing Natura 2000-sites that have lost their importance for the Natura 2000-network, under the condition that this is not the result of non-compliance with Article 6).
- iv. Acceptance of certain ecological dynamics in the overall system of updating the Natura 2000network at EU level, for instance through updates of the reference list for Member States.

For all these approaches, updates should not derive from ecological changes that are the result of not fulfilling the obligations under Article 6 (all paragraphs) of the Habitats Directive, such as the lack of taking measures required under Article 6(1) and 6(2) or the lack of adequate application of Article 6(3) or 6(4) in respect of plans and projects. Furthermore, while priorities may be set when formulating the conservation objectives at the site-level, the Commission is of the view that a Member State does not have the liberty of not designating a site for Annex I habitat types or Annex II species when these habitat types or species are present in the site above the level of non-significance. In view of the Gibraltar case and other case law of the Court, it is also unsure whether a wilderness approach may result in the complete disappearance of habitat types or species for which the site was designated. In view of the Wilderness Guidelines, this will most likely be less problematic when the relevant habitat type or species has reached a favourable conservation status at the national level, but this discussion is not yet finalised (European Commission, 2013 pp. 44-45; Bastmeijer, 2016 pp. 194-195). Reaching the favourable conservation status of certain habitat types and species at the national level may be relevant for the level of ambition when setting conservation objectives for a site, but does not justify an approach in which the protection under Article 6 at site-level would be completely cancelled. For instance, while leaving space for a wilderness approach in certain areas or circumstances, the Commission explains elsewhere that the "expression 'integrity of the site' shows that focus is here on the specific site. Thus, it is not allowed to destroy a site or part of it on the basis that the conservation status of the habitat types and species it hosts will anyway remain favourable within the European territory of the Member State" (European Commission, 2000 p. 39).

The above discussions gave various insights that roughly define the boundaries of the 'playing field' for studying and debating the dilemma's from the perspective of the implementation systems and practices of the other selected Member States.

See also European Commission, 'EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones', Luxembourg, 2011, p. 22: "Conservation objectives should not be static; on the contrary, they need to be adapted to the actual evolution of the conservation status of species and habitats and to the evolution of other ecological factors in a complex and dynamic environment." See also p. 20: "The development of conservation objectives for estuaries and coastal areas is a real challenge as these areas are very complex and dynamic ecosystems. The final responsibility for developing appropriate conservation objectives, priorities and instruments that are adapted to national, regional and local contexts always lies with the Member States."

Comparative research: experiences 4 with the dilemmas in other Member **States**

In this chapter we discuss the experiences in the Member States with the Dutch dilemma's that were described in the previous chapters and relate them to their policies and implementation systems. In Section 4.1 we give a general introduction to the implementation of the Natura 2000-network of the Netherlands and the selected Member States and to the division of competences regarding Natura 2000 within the member states between central and regional governments. We also present some general figures on the number of sites and the conservation status of these sites in each Member State. In the following sections, for each member state we highlight in some more detail general characteristics of the implementation system: policy choices with regard to the habitats and species for which sites have been designated, defining Favourable Conservation Status and setting conservation objectives, all constituting the basis for dealing with the regime of Article 6 Habitats Directive. Then we focus on the dilemmas of dealing with this Natura 2000 regime: to what extent are the dilemmas considered to be dilemmas in the selected Member States? And what approaches have been adopted to prevent or address the dilemmas? Where possible, these dilemmas and approaches are illustrated with examples.

4.1 General characteristics of the Natura 2000 network

Introduction to the implementation systems in member states and division of competences In the selected member states, Austria, Belgium and the United Kingdom, a considerable responsibility for Natura 2000 lies at the regional government level. This research focuses on the following regions of these member states: Salzburg, Flanders and England.

Particularly since the entering into force of the Dutch Nature Conservation Act in 2017, the twelve provinces have a substantial responsibility in implementing Natura 2000, although certain responsibilities, such as the designation of sites and setting conservation targets, are still attributed to the central government. The national government has developed conservation targets at the national level and for the designated Natura 2000-sites (Ministry of LNV, 2006). The designation of sites is laid down in legally binding document (so-called 'designation decisions) including not only the lists of habitat types and species for which the site is designated , but also the conservation objectives of the site, see Box x,. The provisions of the Birds Directive and Habitats Directive are incorporated into Dutch law in the Nature Conservation Act⁵⁶. The provinces are responsible for the management of the sites, the realisation of the conservation objectives and assessments regarding exonerations from the Article 6-regime and species protection provisions.

⁵⁶ http://wetten.overheid.nl/BWBR0037552/2017-03-01

Box 0

Information of Designation decree of a specific Natura 2000 area: for example: Natura 2000-gebied Kennemerland-Zuid.

The area is designated for:

De in het eerste lid bedoelde speciale beschermingszone is aangewezen voor de volgende natuurlijke habitattypen opgenomen in bijlage I van Richtlijn 92/43/EEG; prioritaire habitattypen zijn met een sterretje (*) aangeduid:

H2110 Embryonale wandelende duinen

H2120 Wandelende duinen op de strandwal met Ammophila arenaria ("witte duinen")

H2130 *Vastgelegde kustduinen met kruidvegetatie ("grijze duinen")

H2150 *Atlantische vastgelegde ontkalkte duinen (Calluno-Ulicetea)

H2160 Duinen met Hippophaë rhamnoides

H2170 Duinen met Salix repens ssp. argentea (Salicion arenariae)

H2180 Beboste duinen van het Atlantische, continentale en boreale gebied

H2190 Vochtige duinvalleien

3. De in het eerste lid bedoelde speciale beschermingszone is aangewezen voor de volgende soorten opgenomen in bijlage II van Richtlijn 92/43/EEG; prioritaire soorten zijn met een sterretje (*) aangeduid:

H1014 Nauwe korfslak (Vertigo angustior)

H1318 Meervleermuis (Myotis dasycneme)

H1903 Groenknolorchis (Liparis loeselii)

Conservation objectives are listed for each of these: for example:

H2110 Embryonale duinen

Doel Behoud oppervlakte en kwaliteit.

Toelichting Het habitattype embryonale duinen is langs de Hollandse kust een vrij zeldzaam habitattype. Omdat de landelijke staat van instandhouding gunstig is wordt behoud van oppervlakte en kwaliteit nagestreefd. Behoud van de oppervlakte geldt binnen natuurlijke fluctuaties.

https://www.synbiosys.alterra.nl/natura2000/documenten/gebieden/088/N2K088_DB%20HN%20Ke nnemerland-Zuid.pdf

Due to the Austrian constitution nature conservation, hunting, fishing and most spatial planning are in the full responsibility of the 9 Bundesländer (federal states).: Burgenland, Kärnten (Carinthia), Niederösterreich (Lower Austria), Oberösterreich (Upper Austria), Salzburg, Steiermark (Styria), Tirol (Tyrol), Vorarlberg and Wien (Vienna). Consequently, the EU nature conservation directives had to be incorporated into laws in each of the Länder. Such laws may be new (integrated) nature conservation laws, but may also involve amendments of existing hunting legislation, legislation on National Parks, and fishing laws and regulations. Only the Forestry law is established at the federal level. Consequently, the Birds and Habitats Directives are implemented in 9 different systems of legislation, involving 36 different decrees and regulations. As nature conservation is a full competence of the Länder, the selection and designation of the Natura 2000-sites as well as the management of these sites take place at this governance level. This has resulted in many different approaches⁵⁷.

Belgium has been a Federal State since 1993, and consists of three regions (Brussels Capital Region, Flanders and Wallonia). To a large extent, nature conservation is the competence of these regions, with the exception of nature conservation in the marine environment, which is a federal competence. Each region has designated its own terrestrial Natura 2000 sites⁵⁸. The federal government has been involved in the designation and management of marine sites⁵⁹. The first phase of transposing the Habitats Directive into national legislation took place in Flanders in 1997. This incorporation was not complete and in response to an infringement procedure initiated by the Commission, the act was substantially amended in 2002. For various reasons, the act was again

⁵⁷ Geitzenauer, M., Hogl, K., Weiss, G., 2016.

http://www.europarl.europa.eu/RegData/etudes/etudes/join/2009/410698/IPOL-PETI_ET(2009)410698(ANN01)_EN.pdf

⁵⁹ Bouwma *et al.* 2008.

substantially reviewed and amended in 2014. Wallonia transposed the Birds and Habitats Directives in 2001, modifying its Nature Conservation Law of 1973⁶⁰.

In the United Kingdom⁶¹, many competences regarding Natura 2000 are attributed to the regional level: Scotland, England, Wales and Northern Ireland, but the federal government has also responsibilities. Conservation targets have been set at the UK level; however, legislation is developed at the regional level. Legislation for England and Wales was developed in 2010: the Conservation of Habitats and Species Regulations 2010. In Scotland the Habitats Directive is transposed through a combination of the Habitats Regulations 2010 (in relation to reserved matters) and the 1994 Species (?) Regulations. The Conservation (Natural Habitats etc.) Regulations (Northern Ireland) 1995 (as amended) transposes the Habitats Directive for Northern Ireland⁶². In England, the selection of the sites has been coordinated by the public agency Natural England, with assistance of the UK body (JNCC) that helped to develop the scientific standards (Bouwma et al. 2008). Natural England also coordinates the further implementation of Natura 2000 in England.

Proportion of the sites in total land area of member state, and state of conservation of the Natura 2000 sites.

The Netherlands shares the largest similarities in terms of nature types and pressures with England and Flanders, as they are all situated in the Atlantic region, whereas Austria is located in the Alpine region: 28% if the sites has been selected as Alpine area ⁶³. The Netherlands, Belgium and the United Kingdom are among the countries in Europe with the lowest proportion SCIs (in% of land area). In the Netherlands 13,29% of the land area is covered with Natura 2000 sites; in the UK 8,54% (in England $5,7\%^{64}$). In Belgium 12,73% (Flanders $12\%^{65}$) is designated as Natura 2000 site. In Austria 15,13% of the land area consists of Natura 2000, however, there are many differences between the Länder and some of the Länder still have some sites to designate.

The data regarding the average size of Natura 2000-sites is based on the data of the Natura 2000 EU Barometer. No distinction could be made between land areas and marine areas, as the barometer did not contain the number of marine sites. Consequently, the average size is a just a rough indication. In all member states, a considerable amount of the habitat types and species is in unfavourable condition (see Table 1).

Expected relevance of the dilemma's

We expected that the selected Member States have experience with the dilemma's. In Austria we expected to find examples of dealing with natural dynamics as Austria has large areas of wilderness; in Flanders we expected to find experience in respect of combining nature and economy in projects (at least one example is the project of the port of Antwerp in Flanders, which proposed development of new habitat in relation to port development, leading to the Court case Orleans). In the UK/ England it was expected that developments along the coast, like harbours and shore line management, could be inspirational for thinking about smart implementation approaches related to the two dilemmas.

 $^{^{60} \}text{http://www.europarl.europa.eu/RegData/etudes/etudes/join/2009/410698/IPOL-PETI_ET(2009)410698(ANN01)_EN.pdf}$ When in the context of this report is referred to the United Kingdom, we are talking only about Great-Britain as the European Directives are applicable to the European Union.

⁶² http://jncc.defra.gov.uk/page-1379

⁶³ Bundesministerium fur land und Forstwirtschaft Umwelt und Wasserwirtschaft, 2000. Natura 2000. 2. Actualisierte Auflage (Brochure)

⁶⁴ idem

⁶⁵ idem

Table 1 Basis features of the chosen member states.

• The number of sites according to the EU-barometer is not always correct in relation to the number of sites according to the figures from the respondents.

	Austria/ Salzburg	Belgium/Flanders	UK/England	Netherlands
Number of N2000 sites 66	294 N2000 sites:	310 N2000 sites:	924 N2000 sites:	194 N2000 sites:
	247 SCI	281 SCI	654 SCI	139 SCI
Total EU: 27312 sites	99 SPA	255 SPA	272 SPA	76 SPA
Proportion N2000 sites of land	Austria: 15,13% ⁶⁸ .	Belgium: 12,73%	United Kingdom:	Netherlands: 13,29%
areas ⁶⁷	Salzburg: 15%	Flanders: 12%	8,54%	
			England: 5,7%	
Total EU:				
18,12% total land area				
Average area of N2000 site	Austria:	Belgium:	United Kingdom:	Netherlands: 89,25
(terrestrial and marine areas)	43,17 km²	16,64 km ²	102,93 km ²	km ²
Total EU: 42,03 km²	f+1	(2)	[2]	[4]
State of conservation according	Assessment 2013: [1]	Assessment 2013: [2]	Assessment 2013: [3]	Assessment 2013: [4]
to summaries of Art. 17 Report	Habitats (122):	Habitats (93):	Habitats (87):	Habitats (52):
	14% favourable	9% favourable	7% favourable	4% favourable
Total EU 2013	80% unfavourable	90% unfavourable	90% unfavourable	96% unfavourable
<u>Habitats</u> :	7% unknown	1% unknown	3% unknown	0% unknown
Favourable: 16%	Species(338):	Species(130):	Species (103):	Species (78):
Unfavourable: 77%	16% favourable	19% favourable	43% favourable	23% favourable
Unknown: 7%	82% unfavourable	68% unfavourable	42% unfavourable	73% unfavourable
<u>Species</u>	2% unknown	12% unknown	16% unknown	4% unknown
Favourable: 23%				
Unfavourable: 60%				
Unknown: 17%	Nation	E. Elandan /Z	F F	1 1 2017:
Current implementation by	Nature conservation	For Flanders 12:	For England '3 (and	From 1 January 2017:
legislation	falls within the	'Decreet van 19 juli	Wales): Conservation	Wet
	competence of the 9 Länder ⁷⁰ . Therefore,	2002 houdende de	of Habitats and	natuurbescherming,
	N2000 is implemented	wijziging van het Decreet van 21 oktober	Species Regulations 2010	Besluit
	•	1997 betreffende het	2010	natuurbescherming,
	in 9 different systems of legislation. In total			Regeling natuurbescherming and
	about 36 laws/decrees/	natuurbehoud en het natuurlijke milieu', <i>BS</i>		_
	regulations, with many	31 augustus 2002, en		provincial regulations
	discussions on	'Besluit van de Vlaamse		
		regering van 21		
	conformity with the EC Directives. ⁷¹	november 2003		
	Directives.	houdende maatregelen		
		ter uitvoering van het		
		gebiedsgericht		
		natuurbeleid'		

Barometer Statistics Report, Natura 2000 Reporting Services, version 3 Feb 2016, available through http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm.

⁶⁷ Barometer Statistics Report, Natura 2000 Reporting Services, version 3 Feb 2016, available through http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm.

⁶⁸ Some Länder still have to designate more sites. Not all listed sites have formally been designated.

⁶⁹ Based on the EU Barometer 2016, by dividing the total area of terrestrial and marine N20000- sites by the number of N2000-sites.

^[1] Summary of Article 17 report for the period 2007-2012, 'National summary for Article 17 - Austria', 2014, available at https://circabc.europa.eu/sd/a/42724f22-9100-414c-819b-03b8742ad154/AT_20140528.pdf, p. 2.

^[2] Summary of Article 17 report for the period 2007-2012, 'National summary for Article 17 - Belgium', 2014, available at https://circabc.europa.eu/sd/a/eaef99b0-0845-4d76-acd5-ab5287f84ba7/BE_20140528.pdf, p. 2. For data relating to Vlaanderen only, see: Gerald Louette et al, 'Staat van instandhouding (status en trends) habitattypen en soorten van de habitatrichtlijn (rapportageperiode 2007-2012), Instituut voor Natuur- en Bosonderzoek, 2013.

^[3] Summary of Article 17 report for the period 2007-2012, 'National summary for Article 17 - United Kingdom', 2014, available at https://circabc.europa.eu/sd/a/e731be00-187d-48ed-9a37-897b9f201756/UK_20140528.pdf, p. 2.

^[4] Summary of Article 17 report for the period 2007-2012, 'National summary for Article 17 - The Netherlands', 2014, available at https://circabc.europa.eu/sd/a/01efde37-fbd7-404d-81dc-611fb2ae7dae/NL_20140528.pdf, p. 2.

⁷⁰ See, e.g., the Fitness-check Questionnaire Austria: "The federal republic has neither legislative nor administrative (e.g. coordination) competences in that area. The coordination between the federal states is undertaken by working groups and a so-called "Verbindungsstelle". The latter, however, is devoid of competence and can only act as moderator".

⁷¹ See, questionnaire Fitness check, Umweltdachverband: "The implementation processes in nine federal states left room for mistakes. Austrian NGOs and the European Commission had to step in to correct these mistakes (there were 39 infringement proceedings against Austria)"

⁷² https://navigator.emis.vito.be/mijn-navigator?woId=38412

⁷³ www.legislation.gov.uk

4.2 Austria

4.2.1 Implementing Natura 2000 – general characteristics

Selection and designation of sites

The selection of the Natura 2000 sites - 'Europaschutzgebiete' - in Austria was carried out by the Bundesländer⁷⁴. The selection of these European protected sites is focused on the habitat types of Annex I and species of Annex II of the HD and BD species⁷⁵. Some more areas still have to be selected and nominated in 2017 due to infringement procedures. The formal designation takes place through regulations for each area: Natura 2000-Gebietsverordnungen. By 2015, 196 Natura 2000 areas were designated within regional law ⁷⁶. In general, the Verordnungen list the habitat types and species for which the sites are designated. Many of these Verordnungen list complete lists of all occurring habitat types of Annex I and species of Annex II of the Habitats Directive and Birds of Annex I of the Birds Directive, while others merely mention some as examples⁷⁷. A large part of the sites already had a protected status before designating Natura 2000 sites⁷⁸. Particularly the Verordnungen for sites that already had a protected status under domestic law before designation as Natura 2000-site, include also other nature values. The Länder also fill out the Standard Data Forms⁷⁹. In principle, the Länder act independently, but there is informal coordination in Länder conferences and a special Länderarbeitsgruppe (LAG) has been established to deal with international affairs in the fields of nature conservation and biodiversity.

In Salzburg, one third of the Natura 2000 sites was previously an existing nature reserve, nominated for landscape protection or other nature values. To complete the Natura 2000 network Salzburg had to nominate additional sites based on the SCI or SPA annexes. All Natura 2000 sites become Europaschutzgebiete⁸⁰. Salzburg is, as many other Länder, still working on completing the designations, after infringement procedures initiated by the European Commission. As a respondent explained, it is rather difficult in Salzburg to designate new sites, because this can only be done if the landowners agree on designation; this is due to a political decision of the government. Not in all other Länder permission of landowners is needed to nominate a site.

In Salzburg, the Directives are incorporated into the Salzburger Naturschutzgesetz 1999 and the Pflanzen- und Tierartenschutzverordnung and Salzburger Jagdgesetz 1992 (hunting law). In 2016, Salzburg has 44 Natura 2000 sites, of which 7 SPA's are protected according to hunting law, the rest under nature protection law, through a Gebietsverordnung. According to Heilingbrunner, 2014, in Salzburg, the choice was made to publish a non-exhaustive list of habitat types and species in the Verordnungen, in order to be able to respond to natural dynamics of habitat types and species. The Salzburg government referred to the Standard Data Forms for a complete listing of all nature values. In 2017, however, almost all the 44 sites have an updated Gebietsverordnung (2 or 3 are still being negotiated). To give a (randomly chosen) example: the recently updated Europaschutzgebietsverordnungen for the Salzburger Natura 2000 areas Kalkhochalpen and Tauglgries include a list of habitat types of Annex I and species of Annex II of the Habitats Directives⁸¹. The Verordnung of the area Tauglgries also lists several other characteristics and values of the areas, which originates from the area's previously protected status⁸². A respondent confirms that that, if new species occur, in Salzburg only the Standard Data Form is updated and not the regulation itself. The SDFs are updated each year.

http://www.umweltbundesamt.at/umweltsituation/naturschutz/natura_2000/

⁷⁵ http://www.umweltbundesamt.at/umweltsituation/naturschutz/natura_2000/

http://www.umweltbundesamt.at/umweltsituation/naturschutz/natura_2000/

⁽Heilingbrunner et al., 2014)

⁽Bundesministerium, 2000).

⁷⁹ https://www.salzburg.gv.at/themen/natur/naturschutzrecht-2/naturschutzrechtsalzburg/gebietsschutz/europaschutzgebiet

 $^{^{80} \} https://service.salzburg.gv.at/ins/schutz/searchext?gruppeAjanein=on\&auswahlA=ESG$

The authors did not check if these lists are complete.

 $^{^{82}}$ The 'Gesamte Rechtsvorschrift für Kalkhochalpen-Europaschutzgebietsverordnung, Fassung vom 17.11.2016' arranges the perservation of Kalkhochalpen.

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrSbg&Gesetzesnummer=10000448. Gesamte Rechtsvorschrift für Tauglgries - Natur- und Europaschutzgebietsverordnung, Fassung vom 17.11.2016

Conservation objectives

Heilingbrunner et al., 2014 indicate that the formulation of conservation objectives is handled very differently in the Gebiedsverordungen by the Länder. Examples can be found in the Verordnungen under the terms "Schutzzweck", "Schutzziele" and "Erhaltungsziele". According to Heilingbrunner e.a. (2014) in the Länder Tirol and Voralberg sometimes no conservation objectives are set at all in the Gebietsverordningen⁸³. These authors state that the incomplete listing of habitat types of Annex I and species of Annex II of the HD, together with an incomplete setting of conservation objectives leads to problems in view of the objectives of the Habitats Directive. According to a respondent it is often not specified whether the aim is to maintain or to improve the status of the species or habitat types. This is in line with the jurisprudence of the EU C-535/07 (Court case Com vs Austria 14 October 2010⁸⁴) that member states do not need to specify the conservation objectives in regulations. Only one or two Länder specify objectives more detailed, others do it rather weakly. According to a respondent, case Com vs Austria in 2010 should have made more clear what the duty of all authorities is regarding the choice between the goals maintenance of improvement.

In Salzburg, the Naturschutzgesetz 1999, art 22a, 2 states that for Europaschutzgebiete the Verordnung should at least include the 'Schutzzweck' ("Der Schutzzweck hat die Erhaltungsziele (§ 5 Z 9) des jeweiligen Schutzgebietes anzugeben 85"). Some of the Gebietsverordnungen include besides conservation objectives for the habitat types or species that are listed in the directives, also objectives for other nature or landscape values⁸⁶. These extra objectives originate from a previous protected status of the area.

See dor example formulation of conservation objectives for the areas Kalkhochalpen and Tauglgries in Box 1. In Article 2 of these designation decisions or 'Verordnungen', the Conservation Objectives are formulated as: the Erhaltung (which means preservation) of the habitat types of Annex I and species of Annex II of the HD but also they go further than that, for example, the maintaining of other characteristic plants and animal communities in the areas due previous protected status.

the Naturschutzgesets 1999, art 22a, 2

This is in line with the directives: the conservation objectives may also be included in another document, but the researchers did not check whether this option has been chosen..

Judgment ECLI:EU:C:2010:602

Heilingbrunner et al, 2014; they show an example of the Verordnung of Natura 2000 area Seetaler See

Box 1

Conservation Objectives of the Gebietsverordnung of a specific Natura 2000 area, examples of areas Kalkhochalpen and Tauglgries.

Kalkhochalpen

Gesamte Rechtsvorschrift für Kalkhochalpen-Europaschutzgebietsverordnung, Fassung vom 17.11.2016'. Diese Verordnung dient:

- der Erhaltung der soweit vorhanden völligen bzw weitgehenden Ursprünglichkeit des im § 2 bezeichneten Gebietes (mächtiger Kalkgebirgsstock mit einem vielfältigen Karstformenschatz) einschließlich seines besonderen ästhetischen Wertes im vorhandenen Landschaftsraum;
- der Erhaltung typischer Kalk-Trockenstandorte mit den für diese kennzeichnenden Tier- und
- der Erhaltung der charakteristischen, vielfältigen Pflanzengesellschaften und des Tierreichtums;
- der Erhaltung von Lebensräumen nach Anhang I der FFH-Richtlinie (zB Kalk-Felspflaster, lückige Kalk-Pionierrasen, alpine Kalkrasen, feuchte Hochstaudenfluren, kalkreiche Sümpfe mit Davallsegge, Kalktuffquellen, Kalk- und Schieferschutthalden, Kalkfelsen mit Felsspaltenvegetation, nicht touristisch erschlossene Höhlen, permanente Gletscher, Buschvegetation mit Latsche und Alpenrose, Schlucht- und Hangmischwälder, Auenwälder mit Grauerle und Esche, Waldmeister-Buchenwälder, subalpine Buchenwälder mit Ahorn und Bergampfer, bodensaure Fichtenwälder, alpine Lärchen-Zirbenwälder) und der Erhaltung von Lebensräumen zum Schutz von Arten nach Anhang II der genannten Richtlinie (zB Kleine Hufeisennase, Mopsfledermaus, Großes Mausohr, Gelbbauchunke, Spanische Flagge, Skabiosenscheckenfalter, Alpenbockkäfer, Frauenschuh). (https://www.ris.bka.gv.at/Geltende Fassung.wxe? Abfrage = LrSbg&Gesetzes nummer = 10000448).

Gesamte Rechtsvorschrift für Tauglgries - Natur- und Europaschutzgebietsverordnung, Fassung vom 17.11.2016

Schutzzweck, § 2. Diese Verordnung dient der Erhaltung:

- der nach Anhang I der FFH-Richtlinie zu schützenden Lebensräume alpiner Fluss mit krautiger Ufervegetation, alpiner Fluss mit Ufergehölz von Salix elaeagnos, Schlucht- und Hangmischwälder Tilio-Acerion, Mitteleuropäischer Orchideen-Kalk-Buchenwald Cephalanthero-Fagion sowie der nach Anhang II der FFH-Richtlinie zu schützenden Pflanzenarten (zB Gelber Frauenschuh) und Tierarten (Koppe);
- der seltenen und charakteristischen Lebensgemeinschaften von Tieren und Pflanzen, insbesondere der Schotterflächen (zB Flussregenpfeifer, Kiesbankgrashüpfer, Blauflügelige Ödlandschrecke);
- des einmaligen und weitgehend ursprünglichen Landschaftsgepräges. (https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrSbg&Gesetzesnummer=20000530&Sho wPrintPreview=True)

Favourable conservation status

The Umweltbundesamt GmbH (Federal Environmental Agency Limitted) developed documents with indicators and thresholds for the determination of the conservation status (Erhaltungszustand) of the habitat types and species of Natura 2000. The indicators and thresholds are used for defining the FCS status based on the European Documents. These thresholds mark the area for which the conservation status can be described as "favourable" (within the meaning of the Habitats Directive). According to the definition, the conservation status of a habitat type is favourable when both its distribution area and its surface are stable or expand. The structures and functions must remain at least the same. A species is in a favourable conservation status when it has viable populations in a sufficiently large habitat. Their distribution area may neither decrease nor increase in the near future 87. Such documents are made for 80 bird species, 91 (other) animal and plants species and 65 habitat types (Lebensraumtypen), so only part of all the Annex I habitats and Annex II species of the HR, which was due to financial constraints.

These documents are meant to be used by the Länder in relation to the selection of the sites, the formulation of conservation objectives (Erhaltungszielen) for the areas, identification of the management measures, but also for the judgement of deterioration and disturbance and the assessment of plans and projects and monitoring of the sites. However, how the Länder deal with these guidelines, is up to them.

 $^{^{87} \ \} Website \ Vienna: \ https://www.wien.gv.at/umweltschutz/naturschutz/international/vorgaben.html$

According to a respondent, ideally, the conservation objectives should be based on the federal conservation status of habitat types and species. If this federal conservation status is favourable, the goal is maintenance, and if it is not favourable, the Länder should try to improve the status. However, it is not clear if this is done in the various Länder. Today, only informal consultation on contributions of Länder to FCS at federal level takes place. Furthermore, as stated above, the FSC status at federal level has not been clearly defined for all habitat types and species. A respondent indicates that there is no (formal) arrangement in Austrian law that the FCS should be defined and maintained at the federal level. Another respondent indicates that there is no complete overview of the occurrence of habitat types and species in Austria, which means that the overview of the conservation status of the habitat types and species at federal level may not be correct or incomplete. Some Länder, like Salzburg and Vienna and parts of Tirol, Styria, Upper Austria and Voralberg have biotope habitat mapping. As far as species are concerned there is a good overview of plants, bats, birds and butterflies, but other groups are lacking, a respondent states. All the Länder have decided to make an article 11 HD monitor for the whole of Austria to collect data for the Article 17 reports. But also this monitoring will focus on only a part of the habitat types and species. The Federal Environment Agency develops the Article 17 report for Austria, which adds up the efforts of the 9 Länder.

4.2.2 Terms and principles of the Natura 2000-regime

At federal level, the Environment Protection Agency Limited (Umwelbundesamt GmbH) gives some quidance and information on how the terms and concepts of Article 6 are interpreted in Austria. However, since there is no nature conservation legislation for Austria at the federal level, the provisions of article 6 have to be incorporated into the laws of the Länder. This has resulted in a system in which the directives have been implemented in about 36 different regulations. This has been done in the relevant nature conservation laws, forestry law, hunting laws, National Park laws and Fishing laws and in regulations established under such laws.

Of mainly relevant laws only the Forestry law and the Water Law are set on the federal level.

The national Forest Law requires a permission of the forest owner prior to the implementation of measures set in accordance with Art. 6 Habitats Directive and based for example on the Nature legislation of the Länder, which means that implementation of the HD and Article 6 is sometimes retained by private forest owners. For example, if Länder are forced to cut trees as conservation measures under Article 6.1, they need an exception under the Forest Code (Law) and have to compensate the tree-cutting somewhere else. This exception can only be provided if the forest owner gives his permission. In case of a Natura 2000-site where forests have to be removed in order to achieve conservation objectives, this can lead to great difficulties; according to a respondent this kind of problems occur at least in two Ländern. As a result national law conflicts with EU law, where EU law should prevail.

In Salzburg, the Article 6 provisions HD are incorporated into the Salzburger Naturschutzgesetz 1999 and the Pflanzen- und Tierartenschutzverordnung (similar regulations are in place in in other Länder).

Deterioration

The website of the federal Environmental Protection Agency, as well as information of some of the Länder, refer to the term deterioration as used in Article 6. These sources state that a prohibition of deterioration of the areas exists from the moment of listing of the sites: "with the nomination of the areas, the so-called deterioration ban of the Fauna-Flora Habitat (FFH) Directive came into force: the state of these areas cannot deteriorate"88. The Umwelbundesambt further explains how deterioration should be determined. It should follow the condition of the relevant species and habitat types: the assessment of the disturbance and deterioration is based on the conservation status of the protected objects. A disturbance or deterioration occurs when an indicator of the conservation state is adversely affected⁸⁹. The Länder decide upon the required appropriate measures and prohibitions that are needed to avoid deterioration of the sites.

According to a respondent there is no information about governmental interventions based on the application of Article 6.2 for Austria as a whole. He thinks that such interventions are not always the

89 Ellmauer, T. (Hrsg) 2005

 $^{{\}overset{88}{\sim}} \ \ \text{Website Vienna. https://www.wien.gv.at/umweltschutz/naturschutz/international/vorgaben.html}$

subject of an explicit administrative decision. A respondent states further that the Verordnungen hardly identify human activities that are prohibited because of adverse effects for the conservation objectives. Geitzenauer, 2016, indicates different approaches of the Länder, ranging from some restrictions with regard to forestry or (agricultural) management, often related to previous protected status, to no restrictions. The respondent indicates that, instead, the Länder try to work with contracts, especially with farmers, to combine nature conservation with management. A respondent argues that pressure on conservation objectives in most cases arises from agriculture. By 2012, all Länder have adopted management plans for the sites 90.

In relation to Salzburg, a respondent affirms that Article 6 is only applied to conservation objectives of Annex I and II habitat types and species in the Europaschutsgebiete, while it is not applied to other landscape or nature values. The Salzburger Naturschutzgesetz 1999, art. 22a, 3 states that: "Measures may be prohibited or commanded, and certain interventions may be permitted in general or by means of an exceptional authorization from the government. Commands and prohibitions and authorizations shall ensure that the natural habitats are not deteriorated and species of animals and plants significantly disturbed"91.

Management plans in Salzburg are only made for those sites where there is human activity. The plans are made by planning-bureaus in collaboration with landowners and scientists. The deterioration by non- or not appropriate management should be avoided but in practice it is difficult to force a landowner to undertake certain management measures. At present management of the sites is not a big problem because Salzburg negotiates with landowners and makes management agreements before sites are designated. So landowners will know what to expect for future management, like maintaining special types of meadows.

Integrity of the site

The German translation of the term 'integrity of the site' is 'das Gebiet als solches' (,...wenn sie festgestellt haben, daß das Gebiet als solches nicht beeinträchtigt wird'). We have not checked how the term 'integrity of the site' has been included in the regulations of the Länder (except for Salzburg, see below). The website of the Environmental protection agency seems to refer to the habitat types of Annex I and species of Annex II (HD) when it refers to integrity of the site: "Eine Genehmigung von Plänen und Projekten ist zunächst nur dann möglich, wenn das Natura-2000-Gebiet bezogen auf die Schutzobjekte, d.h. Lebensraumtypen und Arten der Anhänge, nicht beeinträchtigt wird".

According to a respondent, in Salzburg there is no concrete legal interpretation of 'integrity of the site'. In its nature conservation law, Salzburg chooses to refer to the 'essential elements' that are needed for the conservation objectives. Paragraph 22a(4) of the Naturschutsgesetzes 1999 reads: "Vor Erteilung der Ausnahmebewilligung ist von der Landesregierung zu prüfen, ob der Eingriff das Europaschutzgebiet in seinen für die Erhaltungsziele wesentlichen Bestandteilen erheblich beeinträchtigen kann (Verträglichkeitsprüfung). Die Bewilligung ist nur zu erteilen, wenn keine erhebliche Beeinträchtigung zu erwarten ist." So the integrity of the site is related to the essential elements needed to achieve conservation objectives.

Precautionary principle

The federal Environmental Protection Agency (Umwelbundesamt) gives some information on its website on the precautionary principle in relation to Article 6 HD. It states that deterioration and disturbances should be recognised, tested and averted before they can take place: Der Verträglichkeitsprüfung unterliegen "Pläne und Projekte...., die ein solches Gebiet (FFH-Gebiet) einzeln oder im Zusammenwirken mit anderen Plänen oder Projekten erheblich beeinträchtigen könnten". Damit ist die Prüfpflicht schon durch die begründete naturschutzfachliche Vermutung einer möglichen nachteiligen Wirkung auf das FFH-Gebiet bzw. Vogelschutzgebiet gegeben⁹²,.

The respondents do not know about national case law concerning the precautionary principle. According to the respondents the interpretation of the Waddensea case law is followed and the precautionary principle is only applied to Article 6.3.

Geitzenauer, 2016

⁹¹ Salzburger Naturschutzgesetzes 1999 Europaschutzgebiete, art. 22a, no 3.

http://www.umweltbundesamt.at/umweltsituation/naturschutz/natura_2000/nvp/

According to one respondent the Appropriate Assessment is in some Länder regulations only required on application of the developer. This approach is in contradiction with the Habitats Directive. As a result authorisation of projects would be possible without a nature permit. In other Länder the Appropriate Assessment is only applied to projects and not to plans. So plans are assessed in Spatial Planning Law and projects are assessed in Nature Conservation Law.

In Salzburg projects and plans are subjected to an appropriate assessment in case of any likely significant effect. The Naturschutzgesetz 1999, art 22a, no 4 states: before granting an exemption, the state government must examine whether the intervention can significantly impair the protection of the site and its essential elements for the conservation objectives. The authorization is to be granted only if no significant impairment is to be expected ⁹³. According to the Waddensea case no reasonable doubt may remain as to the absence of adverse effects on the integrity of the site, so significant effects have to be excluded.

4.2.3 Dilemma A: Connecting economic development and ecological restoration

Relevance of the dilemma

The respondents have different views on the relevance of this dilemma in Austria.

According to one respondent this dilemma is definitely recognized and highly relevant for Austria. The respondent observed similar practice of using compensation for mitigation purposes before the Brielscase. Also in Austria there is a tendency that if a site is not in a favourable condition and the authority wants to allow economic developments, developers will mix economic efforts with investments of nature. The respondent doubts the correctness of this practice: member states - in Austria the Bundesländer - are obliged to take appropriate conservation measures according to article 6.1 HD. By nature-inclusive planning, measures under 6.3/6.4 HD are used to implement the obligations of 6.1 HD. According to the respondent this is a trick as in such situations the member state does not fulfil its own obligations to implement the EU law but takes advantage of economic developments.

The Federal Nature Protection Agency recognises that the quality of habitats may be improved in plans or projects, but that this is not valid when these improvements should have been made as part of 6.1 or 6.2 measures (In German: "Die Möglichkeit, einen entsprechenden Lebensraum minderer Qualität zu verbessern, besteht nur dann, wenn dies nicht bereits im Rahmen der Erhaltungsverpflichtung hätte erfolgen müssen"). Also, the Agency states that habitat creation or positive measures are only allowed if the measures and the effectual ecological function are reached before a plan or project with significant consequences is carried out⁹⁴.

Current practice of derogation procedure

In Austria according to both respondents permits for projects and plans are based on the procedure of Article 6.3 HD. In general, project developers want to avoid the application of article 6.4. There is a steady practice that prioritises mitigation above compensation. The respondents are not aware of data on the number of permits that have been issued under Article 6.3 or 6.4 HD. In Salzburg, the respondents could not mention a case of 6.4-application; all permits have been issued under 6.3 and a part of them is refused. In many cases projects are withdrawn after the first negotiations. The practice of compensation under 6.4 HD is problematic according to both respondents. There have been seminars on how compensation measures could be taken; however, it is very difficult to ensure the effectiveness of compensation measures before the negative impact of a plan or project will take place. This is especially true in the case of old-growth forest or other types of habitats that are very difficult to restore, such as bogs. Another problem is the availability of geographical areas for compensation.

Response after Briels and Orleans

According to one respondent there have been no changes in the interpretation of Article 6 HD after these Court cases. The procedure under Article 6.3 HD is already very strict, although not always successful from a nature conservation perspective. According to the other respondent in several Länder the regulations will have to be changed to respect the outcomes of the Briels case⁹⁵. According

 $^{^{93}}$ Salzburger Naturschutzgesetzes 1999 Europaschutzgebiete, art. 22a, no 4.

⁹⁴ Website Umweldbundesambt. http://www.umweltbundesamt.at/umweltsituation/naturschutz/natura_2000/nvp/ 95 Mauerhofer, 2015.

to this respondent the legislation of various Länder still enables the practice of using compensation measures as mitigation measures under Article 6.3 HD.

Also the question remains whether the Briels case, relating to habitat types, should also be applied to habitats of Natura 2000 species (both, habitats for HD Annex II species as habitats for birds of Annex I to the Birds Directive).

In Austria, the discussion on the distinction between mitigation and compensation is ongoing. It may well be that Article 6.4 will have to be applied more often.

4.2.4 Dilemma B: combining an ecosystem approach with existing nature values

Relevance of the dilemma

Both respondents know some examples of this dilemma in Austria, although in their opinion the dilemma is not of great importance. According to one respondent nature restoration projects (such as LIFE projects) will mostly be implemented without an article 6.3 HD assessment, considering the measures as obliged under 6.1 HD. For Austria one respondent refers to the National Park Thayatal as an illustration of how natural dynamics can negatively affect habitats. In this site rock-vegetation protected under Annex I HD is negatively affected by tree development due to natural succession, leading to damaging the rocks and decreasing the surface area of the habitat type. At the management level, the problem is dealt with.

One of the respondents emphasizes the dilemma in the case of natural dynamics such as changes related to climate change, which may lead to changes or disappearance of species populations or degradation of habitat types. The Gibraltar case made clear (para. 34) that it may be necessary to adopt measures to prevent natural developments that may cause the conservation status of habitats or habitats of species in SACs to deteriorate, an issue that should be distinguished from deterioration by human activities. So also natural succession should be managed according to this judgement. Depending on the habitat type (semi-natural versus natural types) according to this respondent, it may be inevitable and as a result acceptable that due to natural changes species of habitat types will disappear. But in practice there is, at least in Salzburg, no example of a species that has disappeared from a site in a natural way.

Current practice dealing with ecosystem approaches

By one of the respondents two current LIFE projects were mentioned to illustrate how restoration of ecosystems is being implemented in Austria, while experiencing dilemma b). One has to recognize, that nature is a dynamic process: things will change steadily, this includes habitat types and the occurance of species as well. This is due to the strategy of non-intervention measures (NIM). If one wants to preserve a special species it can be necessary to do interventions consequently: in favour of this (e.g. rare or nearly extinct) species – but perhaps as a disadvantage for others.

The first example concerns the LIFE project in Natura 2000-site Salzachauen where improving natural dynamics would affect alluvial forest. A decision has to be made whether to maintain some 10 hectares of alluvial forest which will disappear in the next 100-200 years because of lack of water, or to re-establish natural dynamics and to loose most part of it now and perhaps get the same area of alluvial forest back in the future. An appropriate assessment was made and approval of the EC was received. The second case refers to a LIFE project in the Wenger Moor with bog and heath which area was previously drained. There was an opportunity to withdraw the drainage system in order to enable the area to become wetland again. The area was also habitat for a rare bird species; after removing the drainage system and cutting down hedges, which were necessary for some other species, the population of the rare bird species increased. This seems to be a management choice in favour of a certain species.

Updating the Natura 2000-system: list of values or sites

According to one respondent, if a site is designated for a species or habitat type, this value has to be preserved and may not disappear. Disappearance can only be acceptable depending on the overall objective of the site and weighing the importance of all conservation objectives, the amount and rarity of new and lost species, and the sustainability of the system. It should also be taken into account if the value which will be lost, can be compensated elsewhere. But in line with the Gibraltar-case it is not allowed to let Annex I or Annex II values disappear, even if it may happen unintentionally.

The other respondent stated that disappearance of species due to human activities has to be avoided and is indeed prohibited by article 6 interpretation. But it may be difficult to prevent the decrease or disappearance of certain species due to natural processes such as climate change. In his wordings: "We cannot influence climate change by a legal act".

The lists of species and habitat types are updated by the Länder. The Länder do this in quite different ways. Some have deleted species from the lists in the Verordnungen in former years and according to one of the respondents it is quite hard for the EC to track these changes as long as the changes are not implemented in the Standard Data Forms. Delisting of sites does not occur, although for some sites the boundaries have been changed. For example, in Lower Austria a Natura 2000-site has been decreased through the exclusion of a area where a motorway was planned after designation and later implemeted.

4.3 **Flanders**

In Flanders, the Birds Directive and Habitats Directive have been implemented in the Nature Conservation Act ('Decreet inzake Natuurbehoud' or 'Natuurdecreet'). Eventually the idea was that the act of 21 October 1997 sufficiently ensured an adequate implementation of the directives, but in response to criticism of the European Commission, the act was substantially amended in 2002. In light of the limited effectiveness of the legislation, the complexity of the legislation and the revised objectives adopted under the Convention on Biological Diversity (e.g., Target 15 on ecosystem restoration), the act was again substantially amended in 2014. 96 End of 2016, the Flemish government emphasised that 'gold plating' in implementing Natura 2000 should be prevented. 97 In Flanders, the competent authority for nature conservation, including the implementation of Natura 2000, is the Agency for Nature and Forest.

4.3.1 Implementing Natura 2000 in Flanders – general characteristics

Selection and designation of sites

Before 2010, the Agency for Nature and Forest has arranged an intensive scientific and participatory process that has resulted in the formulation of conservation objectives at the regional level of Flanders in 2010.98 As part of the same process, for each Natura 2000 site a report was produced in which the contribution of the site to the regional objectives was defined. 99 This has resulted in updated SDFs in 2014. Based on this updated ecological information, all Habitat sites (SCIs) and the Bird sites (SPAs) that overlap with Habitat sites were formally designated as Natura 2000 sites on 23 April 2014. The formal designation has the form of a governmental decree. 100 A number of SPAs that do not overlap with SACs are still awaiting their formal designation as Natura 2000, although this is envisaged in the near future.

The selection of the sites has been based on the relevant criteria of the Directives, which criteria has been literally codified in the Act. Each Natura 2000 designation decree specifies the habitat types and species for which the site is designated. In principle, these are all the Natura 2000 habitat types of Annex I and species of Annex II of the Habitats Directive, unless their appearance is insignificant according to category D of the SDF.

 $^{^{96}}$ Natuurdecreet of 9 May 2014, Belgisch Staatsblad 7 July 2014; see Schoukens 2014, p. 475.

⁹⁷ See the ministerial policy note, adopted by the Flemish Government: Vlaamse Minister van Omgeving, Natuur en Landbouw, 'Quiesconceptnota aan de leden van de Vlaamse regering', 30 November 2016

⁹⁸ See the ministerial policy note, adopted by the Flemish Government: Vlaamse Minister van Omgeving, Natuur en Landbouw, 'Quiesconceptnota aan de leden van de Vlaamse regering', 30 November 2016, p.4. ⁹⁹ Ibid.

The governmental decisions for designating Natura 2000 sites, which also contain the conservation objectives, are electronically available at: https://www.natura2000.vlaanderen.be/publicaties.

Conservation objectives

The conservation objectives of a Natura 2000 site have been formalised through the decrees by which the site has been formally designated, see Box 2. These objectives are based on a report 101 and in principle relate to all the Natura 2000 species and habitat types for which the site has been selected and/or which are present in the site. 102 According to Article 7 of the Decree on the designation of SACs and the determination of conservation objectives of 2010, these site specific conservation objectives may be defined in terms of maintaining or improving the quality, surface or population size, or the distribution of the relevant habitat types and species. 103 This formulation as well as the Natura 2000designation decrees clarify that objectives can mainly take two different levels of ambition: increase of surface and quality of habitat types and/or population size of species OR maintaining the current surface and quality of habitat types and/or population size of species. Tables attached to the designation decrees may further specify the objectives, for instance by stating that habitat types should be "well developed" while indicating the characteristics of such a well-developed habitat type. Also for species, the conservation objectives may be more specific in respect of the aims regarding population level and aims regarding the quality of species habitats. An example is the improvement of the connectivity of species habitats. 104

Box 2.

Information of Designation decree of a specific Natura 2000 area, example Mechelse Heide

https://natura2000-prd-477218783059.s3-eu-west-1.amazonaws.com/s3fspublic/mechelse_heide.pdf.

The designation decree lists 15 habitats and 5 Species; for each of these a detailed conservation objective is included, for example:

Habitat 4030 Droge Europese Heide. Oppervlaktedoelstelling: Doel: Actueel: 833.5 ha. Behoud actuele oppervlakte +- 60 ha door omvorming. Einddoel: 893.5 ha Kwaliteitsdoelstelling: Goed ontwikkelde droge heidevegetatie met: aanwezigheid van alle ouderdomsstadia van struikhei; beperkte boomopslag (<20ha); beperkte vergrassing met pijpestrootje, bochtige smele (<30%); hoge soortenrijkdom. Er dient speciaal aandacht geschonken te worden aan het bremrijke subtype van droge heide dat typisch is de Hoge Kempen.

As explained above, conservation objectives in principle relate to all the Natura 2000 species and habitat types for which the site has been selected or which are present in the site, however, for some Natura 2000 sites conservation objectives have also been formulated in respect of Annex IV species that do not appear on Annex II. For instance, the Natura 2000 site Dijlevallei has not formally been designated for the Common midwife toad (Alytes obstetricans, an Annex IV species that is not included in Annex II), however, the decree to designate the site includes conservation objectives for this Annex IV species. 105 The regime of Article 6 of the Habitats Directive is also applied in relation to these conservation objectives for Annex IV species. The rational is that this approach is considered important and useful for achieving the objective to restore a favourable state of conservation for this species in Flanders.

The issue of site selection and designation as well as the issue of setting conservation objectives are seldom the subject of court cases.

¹⁰¹ 'Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van instandhoudingsdoelstellingen', Article 8, para 1. available at https://navigator.emis.vito.be/mijnnavigator?woId=30044.

Ibid., Article 8, para. 1, under (1).

¹⁰³ Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van instandhoudingsdoelstellingen, available at https://navigator.emis.vito.be/mijn-navigator?woId=30044.

¹⁰⁴ See, e.g., the designation decree for the "Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen", available at $https://natura2000-prd-477218783059.s3-eu-west-1.amazonaws.com/s3fs-public/12_-_mp_1.0_vlaamse_ardennen.pdf.$ Decree to designate the Dijlevallei, available at

 $https://natura2000-prd-477218783059.s3-eu-west-1. amazonaws.com/s3fs-public/28_-_mp_1.0_dijlevallei.pdf, amazonaws.com/$

Favourable Conservation Status

In 2010 conservation objectives were established for the whole region of Flanders in respect of all species and habitat types listed in the annexes of the Birds and Habitats Directives. ¹⁰⁶ According to the interviewees "these regional conservation objectives are considered to be what is minimally required to reach the favourable conservation status for the habitat types and species concerned on the Flemish regional level."

This is confirmed by the Decree. The Decree on the designation of SACs and the determination of conservation objectives these regional conservation objectives may be defined as the objectives for maintaining, restoring or achieving the favourable conservation status at the Flemish level of the species and habitat types that require protection in Europe and which are present in Flanders. According to Article 4 of the same decree, the Flemish conservation objectives are defined in the form of goals regarding the maintenance, restoration or development of the quality, surface or population size, or the distribution of the relevant habitat types and species. These conservation objectives as a minimum for ensuring a favourable conservation status are based on research: for all 47 Habitats Directive species (relevant to Flanders) and all relevant habitat types criteria and indicators have been worked out for determining the favourable conservation status on the Flemish level. The criteria are currently being revised and updated.

Articles 4 and 8 of the Decree on the designation of SACs and the determination of conservation objectives of 2009 makes clear that these regional conservation objectives must be taken into account when determining the importance of a site for Natura species and habitat types. Consequently, the regional conservation objectives also influence the conservation objectives at site level. This seems logical as the conservation objectives of designated sites must support the achievement of the regional objectives. The question of whether a favourable conservation status must be established at the level of individual Natura 2000-sites as well, is answered by the interviewees in the confirmative: These SAC-specific conservation objectives are considered to be what is minimally required for the habitat types and species concerned on the SAC level to reach the favourable conservation status.

It is interesting to notice that the 2010 decree on regional conservation objectives states in Article 2 that the regional objectives should primarily be achieved within the Natura 2000 sites, ¹¹¹ however, the interviewees emphasise that efforts outside the sites will be necessary to restore the favourable conservation status of certain Flemish Natura 2000 habitat types and species.

4.3.2 Terms and principles of the Natura 2000-regime

Deterioration

Article 6, paragraph 2, of the Habitats Directive was not incorporated in a sufficient way in the 1997 version of the Act. In response to an infringement procedure initiated by the European Commission, Article 36ter, which provision contains the main components of the Article 6 regime of the Habitats Directive was included in the Act in 2004. Article 36ter, paragraph 2, under a) requires the government to take all necessary measures to prevent any deterioration of the nature quality and natural environment of the habitats of Annex I to the Act and of the habitats of the species mentioned

Filiep Tjollyn, Heidi Demolder, Steven De Saeger, An Leyssen, Arno Thomaes, Jan Wouter, Instandhouding van de Natura 2000 habitattypen, Instituut voor Natuur- en Bosonderzoek, 2008: versie 2.0, Dries Adriaens, Tim Adriaens, Griet Ameeuw, 'Ontwikkeling van criteria voor de beoordeling van de lokale staat van instandhouding van de habitatrichtlijnsoorten', Instituut voor Natuur- en Bosonderzoek, 2009.

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Besluit van de Vlaamse Regering tot vaststelling van gewestelijke instandhoudingsdoelstellingen voor Europees te beschermen soorten en habitats, 23 July 2010, Belgisch Staatsblad Nr. 324, 2010, available at:

http://www.ejustice.just.fgov.be/mopdf/2010/11/05_1.pdf#page=4. See also the ministerial policy note, adopted by the Flemish Government: Vlaamse Minister van Omgeving, Natuur en Landbouw, 'Quiesconceptnota aan de leden van de Vlaamse regering', 30 November 2016, p.4.

¹⁰⁷ Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van instandhoudingsdoelstellingen, available at https://navigator.emis.vito.be/mijn-navigator?woId=30044, Art. 1, under 17

¹⁰⁸ Ibid., Art. 4:

Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van instandhoudingsdoelstellingen, Article 4 and Article 8, § 1, 4°.

Besluit van de Vlaamse Regering tot vaststelling van gewestelijke instandhoudingsdoelstellingen voor Europees te beschermen soorten en habitats, 23 July 2010, *Belgisch Staatsblad* Nr. 324, 2010, Art. 2

in Annexes II, III and IV to the Act, as well as of the regularly in the Flemish territory occurring migratory species not listed in Annex IV, within the Natura 2000 sites. 112

A definition of the term deterioration is not included in the Act or regulations under the act, however, the explanation to the Bill makes clear that this term must be interpreted in line with the guidance of the European Commission on Article 6 of the Habitats Directive. 113 The document summarises many of the paragraphs of the EC guidance document (see also Chapter 3 above). In addition, the explanation to the Bill underlines that the provision applies to any deterioration ("elke verslechtering"). 114 The explanation to the Bill also explains that the terminology of 'nature quality and natural environment' in relation to habitat types differs from Article 6(2) HD to ensure a good connection with the definitions of these terms in the Act ('natuurkwaliteit' and 'natuurlijk milieu') and stresses that the term 'nature quality' also include the quantity (surface) aspect of habitats. 115 The document further explains that the fact that the measures must be 'appropriate' means that they should contribute to the favourable conservation status of the relevant habitat types and species and that account should be taken of economic, social and cultural requirements and regional and local characteristics. ¹¹⁶ This connection between the term deterioration and the objectives of the directives and particularly the establishment and maintenance of the favorable conservation status is further underlined with references to the EC Guidance on Article 6 of the Habitats Directive. 117

Integrity of the site

Article 2, under 38°, of the Act defines integrity of the site as the complete set of biotic and abiotic components, together with their spatial and ecological characteristics and processes, which are necessary for the conservation of the habitats types and natural habitats of species for which the site has been designated as well as species listed in Annex III to the Act (Flemish species of Annex IV of the Habitats directive). 118 This relation to Annex IV species in this definition is remarkable as this would mean that in applying Article 6(3) HD (Art. 36ter(3) and (4) of the Act) also the ecological requirements for Annex IV species should be taken into account. In the explanatory document to the Bill, this appears not to be confirmed. With a reference to the European Commission's guidance document on Article 6 HD, the 2002 explanation to the Bill (resulting in the revised Act on Nature Conservation of 2004) explains that the terms integrity of the site must be related to the conservation objectives for the Natura 2000 site, and as explained above, these are generally not related to Annex IV species. It is also explained in the document that negative impacts on natural values, which are not connected to the conservation objectives (the explanatory document mentions, for instance, 'marring of the landscape - landschapsontsiering') fall outside the scope of the assessment of effects under Article 6(3) HD.

It appears that the integrity of the site is closely related (or possibly identical) to the 'ecological requirements' for habitat types and species of community interest for which the site has been designated. The Flemish Regulations on the designation of SBZs and the determination of conservation objectives defines the term 'ecological requirements' as the scientifically defined abiotic and biotic requirements for maintaining or restoring the favourable conservation status of habitat types and populations of species of community interest and their natural habitats. 119

The conservation objectives of a site are related to the aims of the directives (restoring and maintaining favourable conservation status of habitats and species of community importance), however, the explanatory document makes clear that assessing the effects for the integrity of the site requires an assessment at the level of the relevant Natura 2000 site. This means that the fact that a

113 Explanation of the 2001/02-Bill to amend the Flemish Decreet inzake Natuurbehoud, Stuk 967 (2001-2002) - Nr. 1, available at: http://docs.vlaamsparlement.be/docs/stukken/2001-2002/g967-1.pdf, p. 31 e.v.

 $^{^{112}}$ Natuurdecreet, Art. 36ter, § 2:

 $^{^{114}}$ Explanation of the 2001/02-Bill to amend the Flamish Decreet Natuurbehoud, Stuk 967 (2001-2002) – Nr. 1, available at: http://docs.vlaamsparlement.be/docs/stukken/2001-2002/g967-1.pdf, p. 31.

Explanation of the 2001/02-Bill to amend the Flamish Decreet Natuurbehoud, Stuk 967 (2001-2002) – Nr. 1, available at: http://docs.vlaamsparlement.be/docs/stukken/2001-2002/g967-1.pdf, p. 32.

¹¹⁷ *Ibid.*p. 32-33.

¹¹⁸ Article 2, under 38°, of the Act: Natuurdecreet 2014, note 108.

¹¹⁹ See for the information that must be included in this report, Article 8, para. 1 of the 'Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van $instandhoudings doelstellingen', available\ at\ https://navigator.emis.vito.be/mijn-navigator?woId=30044,\ Art.1 and Article\ 5$

habitat type or species is in a favourable conservation status may not constitute an argument for destroying a Natura 2000-site or part of it. 120 The explanatory document to the Bill also quotes the phrases of the EC guidance document, emphasising that the terms integrity of the site refers to the completeness of the ecosystem; an ecosystem that is to a certain level resistant and is capable to restore from changes.

Precautionary principle

The Act does not include an explicit reference to the precautionary principle, however, as the principle is an integrated component of the Article 6 regime, the principle is implicitly incorporated in the Act as well. This is most evident in respect of Art. 36ter, paragraph 3 and particularly paragraph 4 (the implementation of 6(3) HD). 121

Case law makes clear that this principle as codified in this provision is being applied by the national courts. 122 The approach to authorize activities while there is still a certain degree of uncertainty, under the condition of monitoring and with the option to intervene in time to prevent significant effects ('hand on the tap' approach) is sometimes applied in relation to wind turbines; however, the government is reluctant to apply this approach due to the amount of efforts needed in the postauthorization phase.

For the practical application of this regime for plans and projects, the Agency for Nature and Forest has developed practical tools. The first tool relates to nitrogen deposition on Natura 2000 sites and supports developers and governments to get a first indication whether the Natura 2000 regime for plans and projects may apply and whether an appropriate assessment might be required ('voortoets'). 123 To support stakeholders in conducting the appropriate assessment itself, other tools have been developed, although the current focus is on specific types of impacts (e.g., nitrogen deposition). 124

As discussed in Chapter 3, the precautionary principle also applies to the interpretation and application of Article 6(2) of the Habitats Directive. This provision has been incorporated in the Flemish Act through Article 36ter, paragraph 2. The explanation to the Bill explicitly addresses the relevance of the precautionary principle by quoting the relevant phrase of the EC guidance on Article 6^{125} .

4.3.3 Dilemma A: Connecting economic development and ecological restoration

Relevance of the dilemma

It is evident that this dilemma is relevant for Flanders as the Orleans judgment of the Court of Justice relates to a Flemish case: the Antwerp Harbour project (see Chapter 3). The interview with the experts of the Agency for Nature and Forest shows that on the one hand, the Agency understands the reasoning of the Court, while on the other hand regretting the limitations for win-win-approaches (ecology-economy) deriving from the Court's strict interpretation. Respondents stated: "The conclusion from this [Orleans] judgement seems to be that positive measures for nature as part of an economic plan or project are not impossible, but they have to be in place in time, in order for them to be assessed on their actual importance and not just their expected importance at a time when they are not in place yet. Great care must be taken when integrating positive measures for nature as part of an economic plan or project, because there is a very thin line that separates those measures from allegedly coming into conflict with articles 6(2) and 6(3) of the Habitats Directive. This is unfortunate as it seriously narrows the opportunity for inserting such positive measures."

However, the experts are of the view that the Briels and Orleans judgments do not necessarily block all options for connecting ecological restoration and economic investment. There still appears to be

¹²⁰ Explanation of the 2001/02-Bill to amend the Flamish Decreet Natuurbehoud, Stuk 967 (2001-2002) - Nr. 1, p. 9:

¹²¹ Decreet inzake Natuurbehoud, Art. 36ter, para. 4 See on the precautionary principle as codified in Article 36ter also the explanation of the 2001/02-Bill to amend the Flamish Decreet Natuurbehoud, Stuk 967 (2001-2002) - Nr. 1, p. 37.

¹²² See, for instance, Afdeling Bestuursrechtspraak, Belgische Raad van State, arrest nr. 206.911 van 13 augustus 2010, in de zaak A.192.847/X-14.210, para. 6.3.4, beschikbaar op http://www.raadvanstate.be:

¹²³ Agency for Nature and Forest, 'Voortoets van de passende beoordeling: depositiescan', available at https://www.milieuinfo.be/voortoets/.

For an overview, see https://www.natura2000.vlaanderen.be/passendebeoordeling.

Explanation of the 2001/02-Bill to amend the Flamish Decreet Natuurbehoud, Stuk 967 (2001-2002) - Nr. 1, available at: http://docs.vlaamsparlement.be/docs/stukken/2001-2002/g967-1.pdf, p. 31.

space for establishing win-win approaches for ecology and economy as long as the order of things and the timing is carefully considered: ensuring that the positive effects of ecological restoration are a fact before concluding on the appropriate assessment and authorizing the plan or project. The respondents refer to the Sigma-plan 126. The Sigma-plan is a project of the Flemish government (started in 1976 and updated in 2005) aiming to reduce the risk of flooding around the river Scheldt and its tributaries. Preventing flooding as well as shortage of water is combined with the restoration of the river ecosystem and contributes to the objectives of the Nature Directives In their words: "The so called 'Sigma-plan' is a good example of combining economic development and positive measures for nature, specifically measures to realise conservation objectives (+ also flood management, as a third feature). In this plan, both economic development and measures for nature are involved in one big plan covering several 1.000's of hectares (in a number of areas – not in one big area)". The Sigma-plan originated before the Orleans-arrest and is focussing less on concrete project developments in comparison with the Antwerp Harbour project.

In the interviews also in respect of such more advanced approaches two clear potential obstacles were mentioned:

- 1. Realisation of ecological restoration before the authorisation may not work for habitat types that take a very long time to develop (old growth forests);.
- 2. Developers may not be interested in investing in ecological restoration without full certainty that they will have space for their economic ambitions at a later stage (see below).

In respect of the question whether the strict interpretation of the Orleans-case should also apply to positive measures to neutralise negative impacts on birds habitats in a Natura 2000-site, the Flemish experts interviewed for this research are not fully sure what the position of the Flemish courts would be. This question has not yet been raised before the courts. The experts explained that one reason for this limited attention might be that in practice, emphasis is strongly put on 'real' mitigation in the meaning of the Briels-case and on finding alternatives to prevent adverse impacts.

Response after the Briels and Orleans judgments

The experts emphasise that - following the case of the Antwerp harbour - "the mitigation track seems to be off limits as long as the positive measures are not yet in place." In theory, the experts recognize that the practice of implementing the Natura 2000-regime may show three types of responses: i. conclude more often that (even without restoration measures) a plan or project does not cause significant impacts;

ii. more frequent use of Article 6, paragraph 4, of the Habitats Directive;

iii. improve win-win approaches for ecology and economy by ensuring that the positive effects of ecological restoration are a fact before concluding on the appropriate assessment and authorizing the plan or project.

The experts do not recognise a clear trend (yet) in Flanders. The first approach might be within the boundaries of the Natura 2000-systems, but in view of the strict case law on the application of the precautionary principle in the framework of Article 6(3), this approach must be limited to those situations where there are no reasonable scientific doubts about possible significant effects. Response ii) (more frequent application of Art. 6(4) HD) may be a response as prior to the court cases this path was seldom taken. The experts were aware of only a very few cases in Flanders (e.g., Deurganckdok and the Port of Zeebrugge). One of our respondents states that, in respect of option iii), the actors involved in the Antwerp Harbour project advocated that they in fact were applying this option; however, advocacy by NGOs to codify this approach by law was unsuccessful. However, in view of the Court of Justice judgments this option may receive more specific attention. In respect of the above mentioned concern that developers may not be interested in investing in ecological restoration without full certainty that they will have space for their economic ambitions at a later stage, one expert suggested in the interview the option of signing a contract under private law between the investor and the Agency for Natura and Forest to allocate and ensure 'space for development'.

see http://sigmaplan.be/nl/over-het-sigmaplan/

Respondents refer also to two other approaches to connect ecological restoration and economic development within the framework of Natura 2000, taking into account the Briels- and Orleans judgments:

Specifying conservation objectives in Natura 2000-sub-zones

In the past, the idea has been developed to specify the conservation objectives for zones of a Natura 2000-site ('deelgebieden'). This is particularly relevant for Flanders as various SBZs in fact consist of a number of different (not connected) sub-zones. In theory, this approach would make it possible to differentiate between various levels of ambition in relation to the conservation objectives. For instance, if the overall objective of the site relates to improvement of quality or increase of surface of habitats or population size, in some sub-zones with relatively higher ecological potential the objectives could focus on this increase of quality and quantity, while in other sub-zones the objectives could focus on maintaining exiting values. Such an approach would be relevant for social-economic developments. While of course the prohibition of deterioration must be respected, less ambitious objectives are likely to cause more space for human activities with potential influences. However, this approach has not been worked out in more detail yet and currently appears not to be high on the agenda of the responsible governments.

Programmatic approaches

In 2014, the Flemish government also incorporated the instrument of a programmatic approach in the Flemish Act on Nature Conservation, which approach may be applied to different types of environmental pressures on habitat types and species of community importance. 127 This approach has been worked out for nitrogen deposition, ¹²⁸ however, developments are frozen at the moment in view of the debates and court cases regarding this programmatic approach in the Netherlands.

4.3.4 Dilemma B: combining an ecosystem approach with existing nature values

Relevance of the dilemma

This dilemma of ecological dynamics and how these dynamics relate to the Natura 2000 regime appears to be less relevant for Flanders, compared to the Netherlands. The topic is not the subject of intensive or regular debates in Flanders. According to the experts this might be explained by the type of ecosystems in Natura 2000-sites: many of the Natura 2000 sites in Flanders are characterized by a relatively low degree of ecological dynamics, particularly compared to the Netherland's Natura 2000 network. However, the topic could become relevant in relation to the Westerschelde. Also here respondents refer to the Sigma-plan that focuses on safety and on more space for natural dynamics.

Also the broader debate on deterioration by human causes and the consequences of Article 6, paragraph 2, of the Habitats Directive – as implemented through Article 36ter, paragraph 2, of the Act, is not much debated. Deterioration by non-management is theoretical possible, but one respondent does not expect that this happens often, although in some forest areas owners are struggling with natural forest management. A respondent explains that there are examples from the past that indicate that also judges are not very aware of the meaning of the prohibition of deterioration. There is some case law on deterioration and article 6.2 HD; for instance, in a case where motor cross in the middle of a Natura 2000 site was challenged, the national court simply assumed that significant disturbance is absent because the event has taken place for about 40 years.

Respondents explain that unforeseen ecological processes can occur, although they are not familiar with such cases in the Flemish region. They state that ideally the management plan should be adjusted if such unforeseen natural ecological processes would occur. Management plans are updated every 6 year.

Updating the Natura 2000-system: list of values or sites

Currently, the issue of keeping the Natura 2000-system in Flanders up-to-date receives limited attention as the implementation system is based on relatively recent scientific information and

¹²⁷ Art. 50ter, para. 4 of the Act: Natuurdecreet 2014."

See https://www.natura2000.vlaanderen.be/pas-programmatische-aanpak-stikstof-en-de-verschillende-fases-van-depas.

administrative action. As noted above, the standard data forms (SDFs) for all sites have been updated in 2014, which constituted the basis for the formal designation of most of the Flemish Natura 2000 sites.

However, the legal and administrative system in Flanders certainly allows for action to keep the Natura 2000 system up-to-date and provides for instruments to support this. For instance, linked to the reporting under Article 17 of the Habitats Directive, the implementation of Natura 2000 has a policy cycle of six years (currently: 2014-2020). Before 2020 the implementation will be evaluated, which may result in updates of the system.

This updating may take place at various levels. For instance, for existing Natura 2000-sites the legislation contains an explicit option to update the conservation objectives. 129 In practice this discussion receives limited attention due to the low degree of ecological dynamics in many Flemish Natura 2000 sites (see above), however, in theory such changes may be initiated. Such updates may relate to new species, such as the beaver. Flanders is aware of the legal limitations to the option of lowering the level of ambition of the conservation objectives or even deleting a habitat type or species from the list for which a site has been designated. In view of these limitations (see Chapter 3), over the past decade active nature restoration has received increasing attention at the level of species that have a (very) unfavourable state of conservation. The experts indicate that if these programs would not be sufficiently effective, discussions on the need to designate additional Natura 2000 sites (e.g. in 2020) are likely. This is in fact another level of updating the system (number of and boundaries of Natura 2000 sites). At this level, updating the system may also be relevant in case of the appearance of new habitat types and species in new sites or the increase of habitat types and species of community importance in certain sites, which sites then qualify for selection and designation as Natura 2000 site. The legal system allows also for updating the Natura 2000-system at this level.

4.4 England

4.4.1 Implementing Natura 2000 in England – general characteristics

Selection and designation of sites

The Natura 2000 sites in the UK are designated on the basis of scientific criteria. All Natura 2000 sites (both SACs and SPAs) on land in the UK are also underpinned by the UK system of protected areas and have a status as Site of Special Scientific Interest (SSSI)¹³⁰. In England, as well as in the UK as a whole, all SPAs and SACs are listed online.

For SACs, the SDFs are available, as well as the list for which habitats and species the site was designated, the so called Qualifying Features 131. These SAC-documents list the habitat types of Annex I and species of Annex II of the HD that were a primary reason for selecting the site, as well as Annex I and II habitat types and species that are a qualifying feature for the site. So together the Qualifying features are:

- Annex I habitats that are a primary reason for selection of this site;.
- Annex I habitats present as a qualifying feature, but not a primary reason for selection of the site.
- Annex II species that are a primary reason for selection of this site.
- Annex II species present as a qualifying feature, but not a primary reason for site selection. difference between habitats and species which are a 'primary reason for the selection of the site' and those which are not is immaterial. Whilst the distinction does cause confusion, it is a result of the moderation exercise which took place when the SAC list was first being drawn up. In terms of how the Directives are applied in England all the Qualifying features are given equal consideration in designation of SAC's and so application of article 6 Habitats Directive.

^{129 &#}x27;Besluit van de Vlaamse Regering van 3 april 2009 betreffende de aanwijzing Speciale Beschermingszones en de vaststelling van instandhoudingsdoelstellingen', Article 9, para. 2.

Natural England, 2012. Natural England Designations Strategy. July 2012

Accessible at: http://jncc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E; EXAMPLE: http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030076

In case other values are present, they were (due to small amounts) not considered required for the network to be coherent. This corresponds with category D on SDF. For all SPAs, the SDFs are publicly available ¹³², (documents with information on the) Qualifying Features are also accessible online.

Conservation objectives

Conservation objectives in England are available for all Natura 2000 sites 133. The conservation objectives are formulated as 'maintaining or restoring' the qualifying features, including the supporting processes of the qualifying features, see Box 3. These conservation objectives are formulated in a fairly general way. For some sites, a supplementary advice is present to support the Conservation Objectives, which describes in more detail the characteristics and processes in a site. According to a respondent, the Conservation Objectives will "provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features as required by the provisions of Article 6(1) and 6(2) of the Directive" 134. The Conservation Objectives must also be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment (article 6.3).

Box 3. Information of Designation decree of a specific Natura 2000 area: for example SAC Exmoor and Quantoc Oakwoods Available are a Citation (which represents a formal description of the reasons why the site has been designated as a Special Area of Conservation) and an Document which specifies the conservation objectives. The Citation lists the qualifying features: Qualifying habitats: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: ☐ Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae). (Alder woodland on floodplains)* □ Old sessile oak woods with Ilex and Blechnum in the British Isles. (Western acidic oak woodland) Qualifying species: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: ☐ Barbastelle bat Barbastella barbastellus ☐ Bechstein's bat Myotis bechsteinii ☐ Otter Lutra lutra (http://publications.naturalengland.org.uk/publication/5696090506526720?category=537400207160 1152) Conservation objectives for SAC Exmoor and Quantoc Oakwoods: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ☐ The extent and distribution of qualifying natural habitats and habitats of qualifying species \Box The structure and function (including typical species) of qualifying natural habitats $\hfill\square$ The structure and function of the habitats of qualifying species ☐ The supporting processes on which qualifying natural habitats and the habitats of qualifying ☐ The populations of qualifying species, and, \square The distribution of qualifying species within the site. (http://publications.naturalengland.org.uk/publication/5696090506526720?category=537400207160 1152)

¹³² Accessible at: http://jncc.defra.gov.uk/page-1401

¹³³ See: http://publications.naturalengland.org.uk/category/6490068894089216 http://jncc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E

Favourable conservation status (FCS)

Conservation status has been assessed at the geographical level of the UK¹³⁵. Each site should contribute to the FCS of species and habitat types at UK level. The England SACs contribute to achieving FCS, as expressed in the conservation objectives. All Natura 2000 sites are legally underpinned by SSSI designations ¹³⁶. The conservation status is not specified for each Natura 2000 site¹³⁷; however, for each underpinning SSSI there are documents which specify how its condition is to be assessed 138. Therefore, the condition of each Natura 2000 site is known, based on the underpinning SSSI designations and documentation. The JNCC defines conditions of the habitats such as: Favourable, Inadequate but improving, and Bad but improving, based on the SSSI system. It is assumed in England that reaching the conservation objectives should "ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features" 139. And that in reaching the conservation objectives "the site will be contribute to achieving Favourable Conservation Status for that species or habitat type at a UK level" 140.

4.4.2 Terms and principles of the Natura 2000-regime

The 1994 Conservation Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into UK law. The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation Regulations 1994 in respect of England and Wales¹⁴¹. The Natura 2000 sites are referred to as "European sites" in these regulations.

Deterioration

The term deterioration is not defined in the Conservation of Habitats and Species Regulations 2010. The Directives provisions art. 6.2 HD "Member states shall take appropriate steps to avoid deterioration" is not easily recognisable in the text: the Conservation of Habitats and Species Regulations 2010 use the words degradation and destruction in relation to the designation of the sites and the obligation for the authorities to "establish priorities for the designation, in the light of the threats of degradation or destruction to which the sites are exposed (par. 11 of the Regulations) $''^{142}$. However, it is clear for the respondents that the possible deterioration of a site is assessed in relation to the conservation objectives for the qualifying features of each site.

England chooses voluntary management agreements as an important instrument to take the management measures in the sites. The JNCC states (for the whole of the UK): "The Regulations enable the country agencies to enter into management agreements on land within or adjacent to a European site, in order to secure its conservation. If the agency is unable to conclude such an agreement, or if an agreement is breached, it may acquire the interest in the land compulsorily 143″. In England, formal management plans with lists of all management measures are not available for each Natura 2000 site. Some management plans have been established for underpinning SSSIs and National Nature Reserves covering the relevant Natura 2000 features.

All terrestrial Natura 2000 sites are underpinned as Sites of Special Scientific Interest (SSSI), which provides the principle site management mechanism. This mechanism includes inter alia: the ability for the Statutory Nature Conservation Agency (Natural England) to control operations that could adversely affect SSSI land within a Natura 2000 site (in accordance with Article 6(2) of the Habitats Directive); and also incentive and advisory aspects, which can secure the necessary active management of SSSI land within SACs (in accordance with Article 6(1) of the Habitats Directive).

 $^{^{135} \} http://jncc.defra.gov.uk/PDF/FCS2007_ukapproach.pdf; for species: http://jncc.defra.gov.uk/page-4063; for habitats: http://proc.defra.gov.uk/page-4063; http://proc.defra.gov.uk/page-4$ http://jncc.defra.gov.uk/page-4064 (These reports relate to the Article 17 obligation)

All SSSIs in England can be found on this website: https://designatedsites.naturalengland.org.uk/ (Search by entering a name of an SSSI, or a name of a county).

 ¹³⁷ In Wales the FSC is referred to the site level in management plans according to a respondent
 138 All SSSIs in England can be found on this website: https://designatedsites.naturalengland.org.uk/. By clicking further, an overview of the conservation status is available for each site.

 $See \ http://jncc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E$

See http://jincc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E

http://www.legislation.gov.uk/uksi/2010/490/contents/made

http://www.legislation.gov.uk/uksi/2010/490/contents/made

Website JNCC: accessed at 3 April 2017: http://jncc.defra.gov.uk/page-1379-theme=textonly

Section 28 of the Wildlife and Countryside Act 1981 requires planning authorities to take reasonable steps to conserve and enhance SSSIs in their decision making. The National Planning Policy Framework (NPPF), which all planning decisions have to be compliant with, also requires that they be protected.

SSSI Remedies information (measures to improve condition) details the range of preventative and proactive measures adopted where the features of a site has been monitored and judged to be in an unfavourable condition. Through this mechanism, Natural England identifies what mechanisms need to be put in place and by whom in order to improve site condition, which is then agreed with a range of partner organisations.

As part of a LIFE project (Improvement programme for England's Natura 2000 sites, IPENS), between 2012 and 2015, for each site a Site Improvement Plan has been developed. Each plan: "provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance".

Article 6.3 HD does not apply to plans and projects that have been authorised before the Article 6 regime became legally effective. If such activities would result in negative impacts on a Natura 2000 site, such activities must receive attention under Article 6.2. However, according to a respondent in England, in an earlier phase of the implementation process, existing activities (operational 'plans and project') with ongoing permits in or near the Natura 2000 sites have been reviewed with the Article 6.3 assessment provisions being applied with appropriate modifications (refer regulation 63). This large project, that took several years to be finalised, resulted in the modification of many of the permits and some smaller permits were completely withdrawn. While Article 6.2 does not explicitly require such an operation, it was clearly a very effective way to ensure better compliance with Article 6.2 HD.

Integrity of the site

It is assumed in England that in reaching the conservation objectives of each site, the site "will be considered to exhibit a high degree of integrity"144. Integrity is not defined in the Conservation of Habitats and Species regulation 2010; however a UK working definition is available based on the Welsh Government Technical Advice Note 5 (TAN5) which defines integrity of the site as follows: "The integrity of a site is the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified or listed"¹⁴⁵. According to the respondents, Natural England is now working on a project describing for each site what is meant by the sites integrity, so what is meant by a sites structure, function and working processes 146.

Precautionary principle

With regard to the precautionary principle in relation to plans and projects, the Regulations follows Article 6.3 HD. The relevant authority has to make an appropriate assessment of the implications of a possibly damaging plan or project for the site in view of that site's conservation objectives and in making a decision the precautionary principle must be applied: "In the light of the conclusions of the assessment, they may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site" 147.

According to a respondent, in practice the CoJEU Waddensea case is leading when it comes to the application of the precautionary principle regarding plans and projects. One respondent stated that this system may be applied too strict in certain instances.

In this light the respondent explained that according to English case law there has to be credible evidence of a real risk that adverse impacts may occur. This risk should, in other words, not be purely

See http://jncc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E

^{145 2009,} Welsh Government Technical Advice Note 5 (TAN5); paragraph 19, Annex 3, 58.

www.gov.uk/guidance/conservation-objectives-for-land-based-protected-sites-in-england-how-to-use-the-site-advice (see also the strategic standard linked on that page)

Conservation of habitats and species regulations art. 21:

http://www.legislation.gov.uk/uksi/2010/490/regulation/21/made

hypothetical. In the practice of England it is a professional (expert) judgement that may indicate the presence of such credible evidence for a 'real' risk.

4.4.3 Dilemma A: Connecting economic development and ecological restoration

Relevance of the dilemma

Cases in which a surplus of habitat is created as a form of mitigation were considered as a possibility before the Briels case, but were not common in England. Respondents explain there is not a tradition or habit that developers will deliver a surplus for nature. The necessity to move towards improvement measures as a way of mitigation is not urgent. In England the cases where Briels would apply seem very rare in general.

There are several explanations for this not being an often used approach. Respondents illustrate: First of all, a project proposer has to show a project does not have a negative effect, not that he can provide an overall gain. As the respondents state, authorities want to avoid that a private sector is required to take positive measures, that could be interpreted as article 6.1 or 6.2 measurements (which are the responsibility of public authorities).

Second, the respondents see practical barriers as a reason why this approach is not often sought by developers: "Having a developer create that surplus, they may have to acquire land in the first place, if they are not land owners, I think this is problematic for many. They may not have the space within the site boundary to create the surplus. It has, I think, not yet been considered by the European court whether or not it is acceptable in context of the interpretation of art. 6.3. So, there is a legal risk attached to this approach, and practical difficulties as well, to create that surplus in the first place and the potential financial implications to do. So, I think for many private individuals there will be fundamental barriers with this approach".

A third explanation is that mitigation in England, often takes place during the phase of project proposals, resulting in projects that avoid negative effects, which can continue without a significant impact (see also next paragraph).

Current practice derogation procedure

Most cases with a likely significant (negative) effect are permitted via the procedure of article 6.3. This means that mitigation requirements can sometimes be quite difficult for a project proposer to meet. Article 6.4 is not often applied in England. Case law decisions explain that permits should be given to developers if they prevent any negative effect, also if the conservation status of a site is unfavourable. According to a respondent the court said "A project cannot be penalized because the site did not yet achieve the required quality. The project cannot be refused, simply because the positive measures have not been taken to achieve an overall objective". In practice, the permitting authorities try to separate article 6.1 conservation measures from mitigation measures, which are connected to the assessed plan or project and are primarily focussed on preventing negative impacts.

Further the practice in England is that if likely significant effects of a plan of project can be avoided by mitigation measures, no appropriate assessment is needed. Mitigation measures which have already been incorporated by a plan/project proposer into a proposal can be taken into account during the screening whether a plan or project may have a likely significant effect. A respondent indicates a difference between the English approach and the Netherlands with regard to mitigation within the article 6.3 HD procedure: "In England, some mitigation measures can be taken into account when the assessment is carried out if there is a likely significant effect of a project. In the Netherlands, mitigation measures are not taken into account in that stage to establish whether there is a likely significant effect". Domestic case law in the UK supports this practice. If measures are implemented which avoid the risk of a likely significant effect, in the screening stage of 6.3 HD it will turn out that no appropriate assessment is needed for this plan or project.

Any positive measures which are taken beyond article 6.1 conservation measures are seen as 'enhancement measures'. Sometimes these measures can be interlinked with conservation measures. But, as we understand, they are not generally interlinked with plans and projects of project developers. Vice versa, a respondent confirms that if a nature restoration plan contains aspects which are not required for the management, these aspects should be subject to a 6.3 appropriate assessment.

In England, there is a reluctance to engage in art 6.4¹⁴⁸. A respondent illustrates: "Of course there are 6.4 cases that have gone through the derogations. Usually they are larger, more significant infrastructure projects or projects such as area shoreline management. But we don't engage in art 6.4 on a regular basis. If article 6.4 has to be applied, depending on the local situation, compensation measures are taken nearby or further away from the impact site, but all considered in the context of the Natura 2000-network". The respondents agree there is a grey area between 6.3 mitigation measures reducing the negative effect and taking positive measures to be considered as 6.4 compensation: for example, a measure may increase the capacity of a site to deal with the impact of the project, and make the area more resilient, in which case the assessment may be concluded that there is no likely significant effect.

If compensation is applied, according to the guideline of the English government (DEFRA) which dates from before the Briels case, it was required that the compensation must be secured before damage occurs 149 : "Compensation must be secured before damage occurs. This includes ensuring all legal, technical and financial arrangements are in place. Compensation measures should normally be delivered before the adverse effect on the European site occurs, as this reduces the chance of harming the network of sites and also ensures there is no loss during the period before the compensatory measures are implemented. In certain situations damage to European sites may necessarily occur before the compensatory measures are fully functioning. There may also be circumstances where the compensatory measures will take a long time to become fully-functioning (e.g. re-creation of woodland). In such circumstances it may be acceptable to put in place measures which do not provide a complete functioning habitat before losses occur, provided undertakings have been made that the measures will in time provide such a habitat and additional compensation is provided to account for this. Such cases require careful consideration by the competent authority in liaison with statutory nature conservation bodies."

Response after Briels and Orleans

The Briels and Orleans cases did not change the practice of appropriate assessments in England.

The government produced a guidance to make art. 6.4 HD more accessible 150. People need greater confidence in how the derogations are applied and to make article 6.4 more legitimate to consider, e.g. to increase the understanding of the scope of overriding public interest.

However, according to the respondents, it does not seem to occur more often. However, according to the respondents, it does not seem to occur more often.

Furthermore, following the Briels case Natural England provided a guideline 151 for considering habitat creation as a mitigation measure within Special Areas of Conservation, the sites under the Habitats Directive (Natural England, 2015). They conclude any proposed creation of habitat would only be possible in the restricted circumstance that new plans or projects can be compatible with achieving the conservation objectives of the site and the maintenance of the sites integrity; in other words, cases that can be realized with no net loss of designated habitat. Under this approach, any proposed creation of habitat within a Natura 2000-site must be:

- Confined to areas which are not designated or supporting habitat (site-fabric).
- Be small in scale,.
- Be technically feasible with a high degree of certainty of success.
- Timed to ensure it can be completed (present and functioning appropriately) rapidly and before the predicted harmful impact is allowed to occur.

Respondents are looking for a further interpretation of the Briels case that can explain if creation of habitat for species is also seen as compensation. As Briels and Orleans are applied to SAC¹⁵², it would be interesting to see if they should be applied to SPA's too. Respondents expect more room for

 $^{^{148}}$ Chapman, 2016. The Nature Directives . . . "Spirit-Crushing" or just poorly understood? An exploration of mitigation measures, derogations and political perceptions'.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/82647/habitats-directive-iropi-draftguidance-20120807.pdf

Habitats and wild birds directives: guidance on application of article 6(4), december 2012

Natural England, 2015: The Habitats Regulations: Natural England's approach to considering habitat creation within a European site as mitigation following the Briels judgement.

To be precise: SAC habitat types, not SAC species.

mitigation habitat for birds (as the Dutch court also confirmed). Up until now Natural England applies the Briels-principle to SAC's as well as SPA's on the basis that CJEU judgments concern the principles of applying article 6(3) of the Directive. Even apart from the Briels and Orleans arrest one respondent states that "Compensation measures might (sometimes) actually better protect the coherence of the network than very novel and untested mitigation measures".

Programmatic approaches

England provides some examples of programmatic approaches:

- Sustainable Alternative Natural Green Spaces (SANGS). Where new houses in an area will increase visitors to the sites, too much recreational pressure may start to have an impact on breeding success of birds. To ensure that increased housing will not result in overall increase of visitor numbers to the site, alternative green space is developed elsewhere that gives residents elsewhere to go. However, this approach is about ensuring that there is no net effect, not about taking positive measures.
- Nutrient management plans for river SACs, to reduce the nitrogen input in the river over time, which allows for some increase from permitted waste water treatment plants. For example housing development might increase the nutrients in the river where nutrient levels are currently too high. Developers fund measures to remove an equivalent amount of nutrients to that which will result from their proposal so they have no net effect. Because wider measures are also taken in the river to reduce the nutrients and achieve the objectives in terms of pollutions you can then allow capacity within permitted individual waste water treatments to be utilised. In this approach it is important to distinguish between wider measures taken by the member state to deliver overall improvements, and those funded by developers to ensure that that their proposals do not compromise the ability of these wider measures to achieve the conservation objectives. In other words, the member state is ultimately responsible for achieving the conservation objectives and project proposers are responsible for making sure that their proposals do not hinder such progress. The scale of the programmatic approach is a river, and this river is a Natura 2000 site.

4.4.4 Dilemma B: combining an ecosystem approach with existing nature values

Relevance of the dilemma

This dilemma is recognised in England, although it is not currently a very important topic. Concerning creating more dynamic systems, there are no examples in England where a whole ecosystem is turned, for example, from saltwater to freshwater. In other cases, like river areas or coastal habitat, flexibility for the operation of natural processes is increasingly being built into the goals of the site by considering what might be the natural dynamics in the context of the conservation objectives. Site objectives are linked to Favourable Conservation Status: some habitats are characterised by shifts of their area in time.

However, unavoidable natural change does occur and it may lead to decline of populations or disappearance of habitats and species from a site. In this case, the respondents take the view that some changes may be inevitable, but there can be scope to increase climate change resilience of features at larger geographic scales. In the case that habitats types or species deteriorate while others are benefiting from management, this should be influenced by nationally-set FCS objectives and duly incorporated in the site conservation objectives, and formulated as 'objectives to the benefit of'. If such negative effects on one feature result from management measures that are required for the objectives of another, respondents consider that likely significant effects in view of a site's conservation objectives could be ruled out with no appropriate assessment necessary.

The Gibraltar case is according to a respondent not interpreted as putting an obligation to prevent natural change such as climate change (see paragraph 2.1). The court refers to particular habitats that came about through ongoing human activities (in this case: hay meadows) where deterioration by natural succession should be prevented.

Current practice dealing with ecosystem approach

How to deal with natural change is discussed as part of the exercise that Natural England is undertaking on further defining the Integrity of each site in England 153. Respondents illustrate that all issues with regard to change are considered in the project, and circumstances are explained where conservation objectives must be adjusted to take account of natural changes.

It is proposed that a site's Objectives could be adjusted in the following cases: A. where they need to allow for natural processes to operate or B. where change as a result of naturally-operating processes has to be accepted (despite any adaptation and resilience measures) even though that might mean an shift in the abundance and/or the distribution of a feature of a site. This is done in order to make sure that site objectives remain realistic and achievable in the face of wider environmental change and that plans and projects allow for positive dynamic change. It would help to decide where natural change is desirable and where to avoid deterioration by natural change. This approach could also prevent situations where conservation measures for one value could conflict with one another; a conflict that should be resolved by setting conservation objectives.

Some examples of ecological restoration which lead to decline of certain species are given by the respondents: in case of a decline of fresh water species due to management in an assemblage of fresh and salt water birds in an SPA, the solution is to define a conservation objective concerning the overall composition and diversity of the assemblage rather than concerning populations of individual species. Another example which is given, is a Natura 2000 site in the Peak District consisting of large areas of dry heath habitat and smaller fragments of oak woodland. Historically the balance was much different than today, with more oak woodland naturally occupying a much greater area. Re-establishing the natural balance of habitats and restoring woodland features in terms of expansion will therefore lead to a reduction of the European Dry Heath habitat. Where the expansion of the oak woodland feature is considered to be necessary and ecologically favourable at this site (considering national FCS objectives) despite corresponding changes in the extent and structure of the heathland feature, it is proposed that this should clearly be set out and justified in the site's conservation objectives.

According to a respondent the question if deterioration is allowed has to be related to the conservation objectives and the context that this provides. These objectives will help to decide if the processes of succession need to be managed or can be allowed.

Natural England's traditional approach to first setting objectives for a site is to apply the values used to support the initial selection and subsequent designation of the site. However, it is recognised that in some cases, for example where there is sufficient evidence to show that a feature was in an unfavourable ecological condition at the time of its designation, or where there is now low confidence in the quality of the original data, it may not be appropriate to adopt this traditional approach. In these circumstances, a site's objectives may therefore be the restoration of a feature to a former historic or a different condition compared to that at its designation.

A respondent argues that management of the site which may result in the deterioration of one specific site-value can be accepted, referring to European case law (C241/08 r.o. 43) in which the Advocate General Kokott stated that "If certain conservation objectives conflict with one another in the sense that the conservation measures required for one objective adversely affect the achievement of another objective, then this conflict must be resolved in the context of defining these objectives."

Updating the Natura 2000-system: list of values or site

Delisting of species or habitat types from sites is not currently a large issue in England. However, it is recognised that a dynamic administration of a site network is ideally needed to keep pace with the natural dynamic changes to sites over time. On the contrary actually adding more sites could be needed for some species (less for habitat types). In some cases updating will be needed for example in SPA's when birds are changing from one area to another. This will be illustrated by the UK's SPA review. Article 4 of the BD is about member states adapting the list of SPA's but the respondent does not see this often in practice. Also the HD contains provisions to de-designate a site. As the knowledge base is getting better in England in terms of distribution of species, maybe some existing sites should

 $^{^{153}}$ Natural England Standard d.d. 01.012.2014. Conservation Objectives for European Sites in England - Strategic Standard.

be excluded now and others included, according to respondents. It would be a positive step if the network could be updated by a formal process.

There was a European case about the de-designation of a site where a species just was not there anymore and cannot be brought back (C-301/12). If sea level rise means that a species disappears, this would be a reason to amend the qualifying features.

5 Conclusions - best practices within the limits of the legal framework

5.1 Dilemma A: Approaches connecting economic development and ecologic restoration

5.1.1 The legal framework

Dilemma A focusses on the question how much space the article 6 HD regime leaves for plans and projects that combine economic development with an ecological investment. As discussed in Chapter 3, article 6 of the Habitats Directive leaves some space for projects that connect economic development and ecological development, however, jurisprudence of the Court of Justice of the EU has clarified the boundaries of this space which now seems more limited than European guidances and case law in the Netherlands have suggested.

The main message from the Court is that in the case of negative effects of a plan or project on habitat types of Annex I of the HD for which a site has been designated, there is a strict distinction between mitigation and compensation measures due to the Briels-arrest 154. Habitat creation to neutralise a destruction of already existing part of a habitat, may not be presented as mitigation measures under article 6.3 but must be considered compensation under article 6.4.

This does not mean that there is no space at all for preventing significant effects via developing or restoring habitat types elsewhere in the Natura 2000-site. In theory, this approach might still be taken within the scope of article 6.3 if the assessment and permission of the competent authorities under this provision is obtained after such measures have proven to be effective and the impacts of a plan or project will be below the significance threshold. 155 This may be concluded from the Orleans-arrest. Thus, type of impacts, location, timeline and effect of the restoration measures are all very important for the assessment process and authorisation under article 6 HD (paragraph 3 or 4). This reasoning is strongly based on ensuring the effective functioning of the regime, which is based on the precautionary principle.

5.1.2 Recognition of dilemma by Member States

All member states recognise dilemma A since the Briels- and Orleans arrests. They all puzzle with the process of offsetting negative impacts of economic projects by mitigation or compensation within the scope of article 6 Habitats Directive. In respect of plans and projects which will not only offset negative effects but even could help to achieve - or realize a surplus to - the conservation objectives, the respondents demonstrate different views.

Figure 1 illustrates different situations with regard to offsetting negative effects. Situation 1 illustrates a situation in which negative effects are mitigated or compensated via regular procedure 6.3 or 6.4 HD. Situation 2 illustrates how negative effects are partly offset by necessary conservation measures 6.1 which is not in line with the legal requirements of article 6.

In the Netherlands the Ministry of Economic Affairs would like to promote nature-inclusive plans and projects which lead to economic development that combines active restoration efforts to achieve the

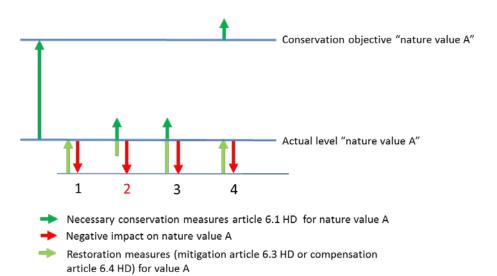
Respondents ask for guidance from the Commission if the Briels-arrest also have to be applied to habitats of Annex II species and/or species of the Birds Directive. For example in the Netherlands Briels is only applied to SAC-habitat types while other parties argue is should be applied to SPA's as well.

This general observation is based on the Orleans case, but the answer to the question whether/to what extent restoration measures must always have been proven to be effective at the moment of conducting the appropriate assessment may possibly depend on the type of situation. This discussion is an important component of the legal debate in the Netherlands regarding the conformity of the Dutch Programmatic Approach for Nitrogen (PAS) with the Natura 2000-regime. A preliminary ruling of the Court of Justice (initiated by the Dutch highest Administrative Court (ABRvS)) may provide more clarity on this issue. As explained elsewhere in this report, the discussion on the Dutch PAS has not been part of this research.

nature conservation objectives of the Directives. Ideally, negative effects are not only neutralised by restoration measures but the project should even provide a positive balance in quantity or quality of the Natura 2000 values. As a result this nature inclusive development approach could actively contribute to achieving the conservation objectives of the Natura 2000 site (situation 3 in Figure 1).

Respondents from England and Austria claim this approach is not compatible with the directives. It is evident that developers have to mitigate or compensate any negative effect of their plans or projects. However, they are not obliged to make an additional positive contribution to achieving the conservation objectives. The respondents explain that this is the task of public authorities only. A positive contribution may nonetheless result from taking a precautionary approach to securing the envisaged effects of the mitigation measures, but this contribution should be clearly distinguished from conservation measures as meant in article 6.1.

The main arguments for this position, as expressed by the experts, is that member states have to fulfil their own obligations to implement the Nature Directives and should not take advantage of private economic developments. Using mitigation or compensation measures under article 6.3 or 6.4 to implement the obligations of article 6.1 HD, would not be correct because the member states are anyhow obliged to take these measures (situation 2 in Figure 1). Consequently, these respondents make a clear distinction between 'conservation measures' and mitigation or compensation measures. Only if these measures are additional to the necessary conservation measures of article 6.1 the approach could be seen as really nature-inclusive. In the last situation the authorities in England speak of 'enhancement measures' (situation 4 in Figure 1). Thus, the small dark green arrow above the level of the 'conservation objective' indicates that the extra measures may not be considered as article 6.1 measures, for instance measures taken outside the Natura 2000 site. Sometimes these measures can be interlinked with conservation measures, but they are not interlinked with plans and projects as developers are not expected to make a positive contribution to achieve the conservation objectives.



Four situations of offsetting negative effects in Natura 2000-sites in the case Figure 1 conservation objectives are yet not achieved and conservation measures according to article 6.1 HD have to be made (left arrow).

Situation 1: negative effects are mitigated or compensated via regular procedure 6.3 or 6.4 HD.

Situation 2: negative effects are partly offset by necessary conservation measures 6.1 (irregular procedure)

Situation 3: negative effects are offset via regular procedure 6.3 or 6.4 AND extra measures are taken to achieve the conservation objectives

Situation 4: negative effects are offset via regular procedure 6.3 or 6.3 AND extra measures are taken additional to the conservation objectives

The respondents from Flanders divert somewhat from the above view and foresee the possibility of a more practical position. Surplus mitigation or compensation is not requested but seen (and stimulated) as an option to be taken when the opportunity arises. In that case it is considered as conservation measures. In general, planning and authorising large economic plans and projects, developers are more often required to contribute to public interests, such as an improved infrastructure and the respondents do not see principle objections for applying this approach to nature conservation as well.

5.1.3 Options to deal with nature-inclusive plans and projects

The countries concerned all recognise the dilemma that the authorisation of nature-inclusive plans and projects whilst offsetting negative impacts by restoration of habitat types elsewhere cannot be authorised under article 6.3. They all explore alternatives to deal with the outcomes of the Brielsarrest and Orleans-arrest as the Court clarified the process of the procedures under article 6.3 and 6.4.

Within the framework of article 6 there are several options to deal with authorization of natureinclusive economic plans or projects. As is shown in Figure 2 the options differ as far as the timeline of measures and authorisation are concerned as well as in respect of the location of the measures. The options are:

- 1. Option 1. To prevent negative impacts by taking mitigation measures within the scope of article 6.3 HD in accordance with the interpretation of the term mitigation under the Court's case law. Offsetting negative impacts by mitigation measures should be taken in time and ensure the prevention of the direct impacts that the plan or project would otherwise have.
- 2. Option 2. To compensate negative impacts by taking compensation measures under article 6.4 HD. The direct impacts are not prevented but compensated by measures in or outside the affected Natura 2000-site, which compensation measures must be effective before the negative impacts

- take place. In addition, it must be proven that the plan or project is necessary for imperative reasons of overriding public interest and that alternatives are lacking.
- 3. Option 3. To ensure first that conservation and/or restoration measures are taken which measures are fully and effectively realised before concluding on the appropriate assessment and issuing the authorisation for a plan or project. If the site's conservation objectives for the relevant Natura 2000 habitat types are fully met (in accordance with article 6.1 HD) with a surplus before the assessment under article 6.3 will take place, it may be possible that negative impacts of a plan or project are assessed as below the significance threshold of article 6.3 HD. 156

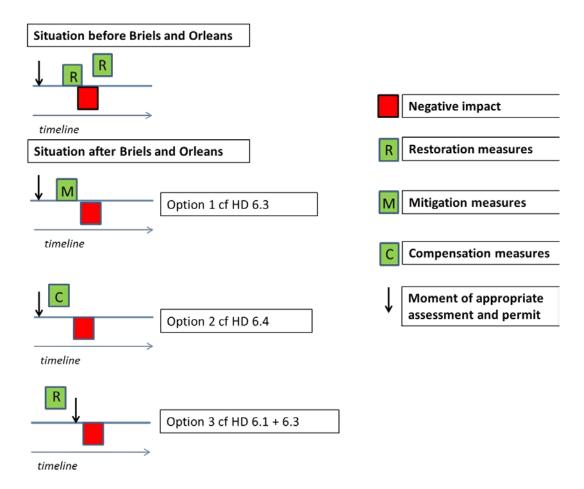


Figure 2 Options to realise nature-inclusive projects and plans after the Briels- and Orleans arrests.

The green squares floating above the bold line indicate the measures can take place outside the impact area (but inside the Natura 2000 site or - in case of compensation - outside the Natura 2000 site on the condition the new area will get a Natura 2000-status). Green squares attached to the bold line indicate that measures are functionally interlinked to the location of impact.

5.1.4 Practice of the Member States

None of the selected countries have already a clear way forward regarding the authorisation of natureinclusive plans and projects. The above identified options were recognized by the respondents, but the

This option is based on the interpretation that one of the main messages of the Orleans case is that an appropriate assessment may not anticipate positive effects for nature, even if in practice such positive effects are planned and envisaged before the negative impacts of the plan or project will occur. Based on this interpretation, ensuring the positive effects for nature above the level of the conservation objectives (surplus) before the conduct of the appropriate assessment may be a possible approach that respects the Natura 2000 regime. However, it may be questioned whether this approach would also apply in respect of habitat types, particularly if one should conclude from the Briels case that any direct negative impacts on existing locations of habitat types should be considered as 'significant' impacts on the integrity of the site, regardless of the question whether the conservation objectives for such habitat types have been met.

countries have not identified one of the options as the preferred approach after the Briels and Orleans arrests. There are no official decisions by the governments how to deal with dilemma A. However, the respondents gave further insight in every-day practice.

In Austria a correct implementation of the Briels-arrest and Orleans-arrest may not be realised in all federal states. As a result it cannot be ruled out that the mitigation option of offsetting negative impacts through realisation of habitat elsewhere in the site may still be applied (= situation before Briels and Orleans in Figure 2). In England when mitigation measures can prevent any likely significant impact, no appropriate assessment is needed. An example is the programmatic SANGS approach: a project could cause significant effects for a Natura 2000 due to an increase of recreational pressure, but by investing in extra recreational areas outside of the Natura 2000-site, such negative effects on the Natura 2000 site is truly prevented. It is Natural England's view that habitat creation can still be provided as mitigation measure under the Briels judgment but only in special cases and under restricted conditions, e.g. that the proposed creation of habitat should be confined to areas which are not designated or supporting habitat - so called site-fabric areas (Natural England, 2015). In Flanders the regular 6.3 procedure is no longer an option for nature-inclusive projects in situations that are similar to the Briels case. In conformity with the Briels judgement, mitigation must relate to the direct effects of the project.

According to option 2, permitting plans via article 6.4 HD, none of the respondents could provide data on the number of plans and projects that had been assessed under this procedure. They all stated this procedure is seldom applied. None of the respondents have observed an increase in article 6.4 procedures after the Briels- and Orleans arrests. The respondents do see a reluctance among developers to engage into this procedure of article 6.4. England has produced a guidance to increase the awareness of developers regarding the accessibility of article 6.4. Although this may potentially result in more plans and projects eligible for the 6.4 procedure, the availability and ownership of land for compensation may be limiting the feasibility of this option. Also the fact that ecosystems within the affected Natura 2000 site have different timelines for development (marshland versus old-growth forest) complicates the possibilities for compensation. In addition to the burden of proof regarding the legal requirements of the procedure (e.g., absence of alternative solutions), these difficulties in relation to ensuring adequate compensation may explain why in current practice the procedure of 6.4 is not often applied.

The third option, to prevent negative impact by taking restoration measures elsewhere in the site which are fully realised to ensure a surplus above the conservation objectives before concluding on the appropriate assessment of article 6.3 (option 3), is relatively new. No examples of this option have been found in this research although this was the original intent of the developers in the Orleans-case.

Several aspects will probably need further investigation to make this option 3 more attractive for developers. The first aspect concerns the fact that the option may require sufficient opportunities to create a surplus, for instance outside the Natura 2000 site or at 'empty' spaces where no Natura 2000 values currently exist, but where the specific habitat type could be developed (in England these spaces are called 'site-fabric', a concept that has been known in the Netherlands as 'cement tussen de stenen'). Particularly in smaller Natura 2000 sites, the space for developing a surplus may be difficult to find.

The second relates to the feasibility of option 3, taking into account the current unfavourable conservation status of a large percentage of the Natura 2000 habitat types and species. Asking developers to play a role in the realisation of the conservation objectives for a site and the establishment of a surplus may be extremely ambitious when sites are large and the objectives require substantive restoration of the relevant habitat types or habitats of species. An interesting solution which is explored in Flanders, could be to specify conservation objectives for specific sub-zones in a Natura 2000 site. This option derives from the research on the implementation system in Flanders. According to the respondents, this option has not been worked out in further detail and it is not expected that this option will receive attention in Flanders in the short term, but from the perspective of studying the feasibility of option 3 the approach may deserve further attention. By specifying objectives for different zones within a Natura 2000 site and differentiating between different levels of ambition (maintaining or improving the relevant habitat types and species), option 3 may become more feasible as restoration and surplus targets might be focused on one particular zone of the site and not necessarily the complete site. This option might on the one hand

respect the legal framework as defined in section 3 while on the other hand creating space of plans and project that contribute to the fulfilment of the overall sites conservation objectives. The third aspect concerns the fact that developers want to have full certainty that they may realise their economic ambitions before they will invest in nature. How to guarantee that they may use the development-space that will be created by ecological restoration, given the fact that the permit may only be given after they have invested in nature? One of the respondents suggested that this guarantee may be established through contracts under civil law between the competent authority and the developer. However, such a contract may not provide full certainty. The case law of the court does not allow the government to ensure that a permit will be issued; it may only promise that if a surplus is created, the space for economic developments will be reserved for the developer that invested in the ecological restoration. But what if the measures are financed and taken by the developer but

would turn out not to be effective? Such concerns may stimulate developers and governments to prefer the article 6.4 procedure or possibly to investigate options to take programmatic approaches.

A special remark should be made in relation to programmatic approaches. These integral plans combine economic developments with ecological restoration at the level of individual Natura 2000 sites (like Nutrient management plans and SANGS in England) or at the regional or national level for specific pressure factors (like the Nitrogen approach in Flanders and the Netherlands). The idea of such approaches is that the plan as a whole is assessed as having no significant effect, however, several complex legal questions arise and several parties doubt whether these approaches - that have been developed mainly prior to the Briels judgement - are in line with the Habitats Directive. Recently (May 17th 2017) the Dutch Court asked for a preliminary ruling of the European Court of Justice. In view of this procedure, an in-depth discussion on the programmatic approach falls outside the scope of this research.

5.2 Dilemma B: Approaches combining natural dynamics with existing nature values

5.2.1 The legal framework

Under this dilemma the question is how to act if natural dynamics, as a result of natural processes or a restoration project, based on an ecosystem approach, will lead to a negative impact on some Natura 2000 species or habitat types, while the overall result of that approach for the site concerned is positive. Knowledge of and attention for natural dynamics is important for ensuring restoration to favourable conservation status and sustainable maintenance of biodiversity in the long term. As the conservation status of many habitat types and species throughout Europe is unfavourable, conservation of existing values is an important starting point. Therefore, from the perspective of effectiveness of the Natura 2000-system, it seems to be important to find the right balance between the specific and strict characteristics of the legal system and the ability to adapt to ecological change in the areas. The discussions in Chapter 3 show the tensions between these two perspectives, but also indicate that there is quite some space for natural dynamics within the Natura 2000-regime.

For instance, when selecting Natura 2000-sites, the boundaries of the natural ecosystem must receive attention. Discussions on the terminology 'integrity of the site' show that this term also relates to the 'wholeness' of the site. For a more precise understanding of this terminology, it must be related to the conservation objectives of a particular site. Particularly when these objectives relate to habitat types that are characterized by a high degree of ecological dynamics (e.g., habitat types in the costal zones and delta), such dynamics will be part of the 'integrity of the site'.

As the European Commission (2011a) explains in relation to the conservation objectives in estuaries and coastal zones: 'they (e.g. conservation objectives) need to be adapted to the actual evolution of the conservation status of species and habitat types and to the evolution of other ecological factors in a complex and dynamic environment'.

This explanation appears to be contrasting with case law of the Court regarding the term 'deterioration' in article 6.2 HD. The Gibraltar case law is very strict and may require measures to prevent deterioration of habitat types and species due to natural processes. However, as explained in Chapter 3, the interpretation of this term also depends on the type and formulation of the conservation objectives of the relevant site.

In setting conservation objectives, Member States have a certain discretionary space. Although it must be clear for which habitat types and species a site has been designated and what the conservation objectives for a site are, there is no strict obligation to quantify these objectives. According to the Commission note on setting conservation objectives for Natura 2000 sites, site level conservation objectives are a set of specified objectives to be met in a site, in order to make sure the site contributes in the best possible way to achieving Favourable Conservation Status at the appropriate level. Member States have the competence to set priorities in formulating conservation objectives, by weighing the objectives up against one another.

According to the European Commission (e.g. in the Wilderness Guidance) as well as the Court of Justice, weighing conservation objectives is interrelated with the notion of integrity of the site. The integrity relates to the qualities of the site as an ecological system (structure and function), to the notion of resilience and to the ability to evolve in ways that are favourable to the objectives of the EU directives. This may also provide space for a certain natural fluctuation of habitat types and habitats of species.

Certain management approaches for habitat types or species may be conflicting. As explained in the opinion of A.G. Kokott in the case of the Commission vs France, such contradictions may be anticipated in the conservation objectives by stating that the restoration of certain habitat types or species may result in a certain negative impact on the other habitat types or species. Such negative impact would than not qualify as 'deterioration' under article 6.2. As explained in subsection 3.2.4, most likely the option of setting 'in favour of' objectives may only be used in those situations where choices between various objectives cannot be avoided through alternative management approaches. If objectives of all relevant Natura 2000 habitat types and species can be achieved, for instance by ensuring that the site is large enough or through the application of different management approaches in different zones of the site, 'in favour of'-objective will not justify the deterioration of certain Natura 2000 values.

Finally, if restoration is needed due to obligations of the Water Framework Directive, the conservation goals of the Habitats- and Birds Directive can be adapted to the goals of the Water Framework Directive (European Commission, 2011b). This is an option is case ecological restoration is needed in degraded Natura 2000-sites, due to former human activities like drainage (leading to desiccated sites) or adding nutrients to the surface- or groundwater (leading to eutrophicated sites). Restoration can lead to deterioration of actual nature values, which are present due to these former human activities. Setting new conservation objectives is only possible provided the habitat types and species concerned can be maintained at a favourable conservation status in the other Natura 2000 sites.

A difficult question that does not receive a clear answer in the case law of the Court and the guidance documents of the Commission is whether it would be acceptable that certain habitat types or species would completely disappear from a site due to natural processes. There may be space for this if the Member State can prove that 'the loss' of such a component is unavoidable, for instance due to climate change, and it can show that all obligations under the directives have been respected. Probably, a condition for this will be that the favourable conservation status of the involved habitat type or species is ensured at the national level. Overall, the burden of proof will be strict.

5.2.2 Recognition of the dilemma by Member states

The dilemma of tensions with the Natura 2000 regime due to ecological changes resulting from restoration projects or measures to improve natural processes is partly recognized in the member states, but is not considered to be very comprehensive or urgent.

For example, in case of restoration projects, this research did not provide examples from the other countries where the ecosystem is fundamentally changed, like in the Dutch Grevelingen case where the system may be transformed from a saltwater lake to a tidal water system. In relation to ecological restoration projects, respondents referred to LIFE-projects for restoration which in practice did not

lead to tensions or challenges with the Natura 2000-regime (e.g., difficulties in relation to deterioration under article 6.2).

In respect of the issue of the relationship between ecological dynamics and the Natura 2000-regime, it must be noted that the degree and type of natural dynamics significantly differ between Natura 2000sites. All respondents agree that the legal conditions that determine whether such processes may be allowed strongly depend on the nature of the habitat types 157 and the size of the site. As stated in the Wilderness Guidance of the European Commission, in most Natura 2000 sites an ecosystem approach will not be the most appropriate form of management, however, non-intervention management may be beneficial for achieving the conservation objectives in natural (primary) habitats with a relative large size. In case of semi-natural habitat types, which originated due to natural degradation or human intervention, there may be nature values which can only survive through active management measures under article 6.1 HD. So the potential to apply an ecosystem approach depends on the scale and type of the landscape, the historical development of the site and the habitat types and species for which the site has been designated.

As a result, the number and percentage of sites with a potential for natural dynamics also differ between Member States. Especially the respondents of Flanders mentioned that Flanders has relatively few sites where (large-scale restricted) natural habitats may be found; Flanders has almost no dynamic river- or coastal ecosystem sites in the Natura 2000 network. England of course does have Natura 2000 coast sites. In England flexibility for natural processes is built in by setting 'in favour of'conservation objectives.

Respondents acknowledge that degradation by non-intervention management in semi-natural ecosystems may occur. Due to the lack of adequate supervision (Flanders) or diffuse conservation objectives in sites (Austria), it is difficult to prove a lack of adequate management and enforcement actions are seldom taken in these member states.

Degradation due to climate change is expected to be inevitable by respondents in England and Austria. In their opinion member states are of course obliged to take necessary measures to prevent deterioration, but in their view the Nature Directives do not urge for measures which are evidently ecologically non-effective.

5.2.3 Options to deal with natural dynamics

The implementation systems of the selected countries indicate that there are several options for finding a balance between the requirements of the Natura 2000-regime and site management based on an ecosystem approach. Without aiming completeness, options that have been applied or mentioned by the respondents may relate to the way conservation objectives are formulated or to the updating of the implementation system.

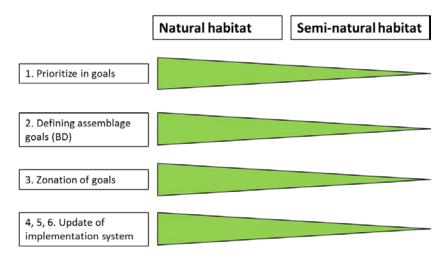
Options relating to the conservation objectives (see also Figure 3):

- 1. Setting priorities when formulating the site's conservation objectives (e.g., by 'in favour of'objectives).
- 2. formulating conservation objectives for assemblages of species (e.g., in sites under the Bird Directives as mentioned by UK respondents).
- 3. Smart zoning of a Natura 2000 site with differentiation between the conservation objectives and/or management approaches for such different zones.

Options relating to the updating of the implementation system:

- 1. Updating the Standard Data Form and adjusting the conservation objectives at site level.
- 2. Updating the selection of sites within the Natura 2000 network at Member State level.
- 3. Updating the reference list per biogeographical region for Annex I and II Habitats Directive.

 $^{^{157}}$ According to article 1b of the Habitats Directive the definition of 'natural habits' means terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural.



Options to deal with natural dynamic within the Natura 2000 system. The more green, the more suitable the option will be to deal with natural dynamics in natural habitats and habitats of species under the Habitats- and Bird Directive.

Member States are not completely free to consider whether they would like to apply certain options. Particularly options 4-6 need attention for keeping the Natura 2000 regime up-to-date and effective. For instance, the European Commission has made clear that the updating of SDFs and the site conservation objectives is a requirement. Updating the reference list per biogeographical region is done every year 158 by the European Commission, based on information of the Member States. Such updates may also have consequences for at least option 4 and 5 and may - under certain conditions lead to delisting sites or designating new sites.

As for the options relating to the conservation objectives, Member States have more discretionary power. This applies, for instance, to the option mentioned in the Wilderness guidance (EC 2013) to establish zones to combine natural and semi-natural habitat types (and related management approaches) within one site. Generally, for this option sites need to be relatively large. In respect of option 1, the Court of Justice has acknowledged that Member States have a certain discretionary space for setting priorities, while AG Kokott has also explicitly stated that 'in favour of' objectives may be acceptable within the framework of article 6 HD. As stated above, most likely the option of setting 'in favour of' objectives may only be used in those situations where choices between various objectives cannot be avoided through alternative management approaches.

Whether option 2 falls within the legal requirements of the Natura 2000-regime is not fully certain and may depend on the specific situation. For instance, this option may result in situations in which the conservation status of one specific species is worsening because this species does not profit from the management measures. This may result in tensions with article 6.2 and/or in not achieving the favourable conservation status at the national level.

Option 3 seems to fit well within the legal requirements.

5.2.4 Practice of the Member States

To prevent deterioration by natural dynamics in the meaning of article 6.2 Habitats Directive and to achieve resilient and robust ecosystems via an ecosystem approach, member states recognize the need for setting clear conservation objectives as well as defining the integrity of the site. These descriptions are needed to manage the sites properly in accordance of article 6.1 and 6.2 but also to assess plans and projects in accordance with article 6.3.

All involved member states have set conservation objectives in accordance with the Commission's Note on designation (confirmed by Nicola Notaro in 2015). This is required for all Annex I habitats and

¹⁵⁸ https://bd.eionet.europa.eu/activities/Natura_2000/chapter2

Annex II species that are significantly present in the site. It turns out that in all selected countries, conservation objectives are defined in terms of maintenance or improvement of the relevant habitat types or species for Natura 2000 sites. Exceptions may be found in some Austrian Länder where it is not always clear whether improvement or maintenance is the goal.

Sometimes, sites have been designated for other natural values than those that have been listed on Annex I or II of the Habitats directive or Annex I or article 4.2 of the Birds Directive. One reason may be the legal protection of the site prior to its designation as Natura 2000 site. For example in Austria about 40% of the Natura 2000 sites already had a formerly protected status before they received the Natura 2000 status. In the designation decision these values are mentioned in general terms, e.g. "the unique and largely original landscape impression" or "esthetical landscape values". According to the respondents these values are not protected through the application of the article 6 regime. In Flanders, the term 'integrity of the site' also includes the ecological requirements for all Annex IV HD species that are present in the site. Consequently, the assessment under Article 6(3) HD must in theory also relate to these Annex IV species. For some Natura 2000 sites, conservation objectives have also been formulated for Annex IV species of the Habitats Directive. These species receive full protection under all components of article 6 HD (e.g., including the requirement to take conservation measures under 6.1 HD). In England sites have only been designated for habitat types and species listed on Annex I or II of the Habitats directive or Annex I or article 4.2 of the Birds Directive.

Both methods of Austria and Flanders could be seen as efforts to bring conservation objectives more in line with the integrity of the site. In Flanders the integrity of the site is defined in the national Nature Conservation Act: "The complete set of biotic and abiotic components, together with their spatial en ecological characteristics and processes, which are necessary for the conservation of the habitats types and natural habitats of species for which the site has been designated as well as the species listed in Annex III to the Act (e.g. Annex IV HD)". England does not have officially defined integrity of the site in the Conservation of Habitats and Species Regulation, but they do have a working definition: "The integrity of the site is the coherence of its ecological structure and function across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified or listed". Currently, Natural England is working on a project to describe what is meant by the sites integrity. This more detailed description should support people in applying the Habitats Assessment under article 6.3 and give managers better guidance in determining what should be the objectives for dynamic habitats. So this can result in a more extensive use of the options 1 to 3. England already has a current practice to set conservation objectives in dynamic habitats for assemblages of species instead of individual species, like saline water birds (option 2). Setting priorities in conservation objectives (Option 1), is already common practise in England in relation to coastal ecosystems.

Updating the SDF with new habitat types or species and setting new conservation objectives could be solutions to adapt the goals of the site to changing ecological conditions. Delisting or permanent degradation of habits will not be acceptable, unless a member state can prove that a favourable conservation status at the national level will be guaranteed and all requirements of the directives have been respected.

Due to the average bad favourable conservation status of most habitat types and species in the member states that we examined, the respondents foresee that the need to select and designate new Natura 2000-sites is more likely than delisting specific conservation goals (option 5).

5.3 Might these approaches limit or solve the dilemmas in the Dutch context?

5.3.1 Limiting or solving dilemma A in the Netherlands

In case of dilemma A options for integral nature-inclusive plans and projects under artikel 6.3 HD are substantially limited as a result of the Briels and Orleans cases. The results of the investigated Member States do not offer new approaches which can instantly be applied to limit or solve the dilemma of the Dutch government with regard to its ambition to combine economic development and ecological development. Nonetheless, the insights we gained in the other countries are helpful for the debate on this topic in the Netherlands.

The implementation practice in England, to prevent any impact by mitigation may constitute a stimulus to put emphasis on 'real' mitigation as explained in the Briels case. Possibly, in the past Dutch implementation practice, developers may have considered mitigation by neutralising negative impacts elsewhere in the site too often as an approach to support the conclusion that the plan or project will not cause significant impacts on the Natura 2000-site. Furthermore, it leaves options open to combine economic developments with the enhancement of the conservation status of habitat types and species in the Natura 2000 site. As long as significant negative impacts are mitigated, positive impacts as a result of a plan or project would fit well in the legal framework. A contra-argument might be the argument expressed by respondents from Austria and England that developers should not be asked to take measures under article 6.1 HD, but this is a topic that has not been discussed thoroughly by the Commission or the Court. One might indeed state that governments have to fulfil their own obligations to implement the BHD and may not take advantage of economic developments, but if the investment for conservation measures will be done by the responsible governments only, developers will take advantage of the space which is created with community money.

In cases where significant effects cannot be mitigated, the European case law can constitute a stimulus to apply article 6.4 HD more often in relation to plans and projects that are needed for an imperative reason of overriding public interest. If plans and projects fulfil the requirements of this procedure, this approach may also provide options for combining economic development and ecological restoration. It should be underlined that the requirements on compensation under article 6.4 are (as all other requirements under the Birds Directives and Habitats Directive) minimum requirements, but the directives leave space for more ambitious approaches. 'Compensation' that aims for ensuring substantial positive effects for the conservation objectives is possible as long as the minimum requirements under article 6.4 are fulfilled as well. This approach of applying article 6.4 to combine economic projects with overall enhancement of the natural quality of the site may be based on voluntary approaches but may also on governmental policy. The Dutch government (in consultation with other Member States or the Commission) might consider whether additional guidance on such a strengthened application of article 6.4 can be helpful,

However, it is clear that not all projects will be able to meet the conditions set out in article 6.4. This is a conscious choice by the European legislator because not every plan or project can justify an exception to the protection of the nature directives.

According to the Dutch case Noordwijkse Golfclub, the only way to realise the enlargement of the golf course within the framework of article 6 HD is to invest in the conservation objectives prior to the assessment and authorisation of the project to ensure that the impacts of the enlargement will be assessed as insignificant under article 6.3. For instance, in this casus compensation of the impacts under article 6.4 was not an option as enlargement of the golf course may not be considered an imperative reason of overriding public interest. As discussed above, it may be far too ambitious to invite a developer to first contribute to the realisation of the conservation objectives with a surplus, particularly in case of large Natura 2000 sites with objectives that require substantial ecological restoration. For these situations, it might be of value to further investigate the option of establishing different zones in a Natura 2000 site, a concept that has been discussed (but not yet implemented) in Flanders. This option might make it more feasible to ask developers to contribute to the fulfilment of the conservation objectives with a surplus for the relevant zone of the Natura 2000 site, before assessing and authorising the relevant project. However, this option would require further study as the option may also further complicate the Natura 2000 implementation. In fact, this approach might de facto result in creating many small Natura 2000 sites while for certain issues (e.g., dilemma B) enlargement of sites may have advantages.

The option suggested by Natural England, where habitat creation within a European site provided as a mitigation measure is compatible with the Briels judgment under a very limited set of circumstances, is similar to the practice of the Noordwijkse Golfclub. This practice was not approved by the Dutch Court concerning the Briels Arrest. At the Noordwijkse Golfclub restoration and impact would take place at the same time where Natural England requires restoration measures should be functional

before the predicted harmful impact will occur. Furthermore the approach of Natural England requires that the habitat creation should be confined to areas which are not designated or supporting habitat.

Overall, the study of the legal framework and the dilemma show that, eventually, investing in the conservation objectives is the most promising way to create space for economic development. It is recommended to invest in the ecological enhancement of the site, in order to reach the conservation objectives and to realize a surplus for nature (option 3 in Figure 2, under section 5.1). As stated there, if the site's conservation objectives for the relevant Natura 2000 habitat types and species are fully met with a surplus, negative impacts of a future plan or project may well be qualified as below the significance threshold of article 6.3 HD. For the Netherlands, it is clear that this is a challenge. as most habitat types in the Netherland have an unfavourable conservation status (see Table 1). Major investments are required to improve the current conservation status. Within the existing Dutch management plans, measures to maintain the current conservation status are published but they lack insight in type, location and time-schedule of improvement measures. While there is an ongoing environmental and spatial pressure at Natura 2000 sites, it will be difficult to achieve the conservation objectives, let alone to realize a surplus.

Limiting or solving dilemma B in the Netherlands 5.3.2

While the options to deal with dilemma A are limited, dilemma B might be less complex than thought. First of all there are almost no Natura 2000 sites which can be categorized as unrestricted natural landscapes in which natural dynamics such as landscape forming processes and spontaneous development are the only aspects influencing the landscape 159. In most Dutch Natura 2000 sites some form of management is needed to maintain the habitat types and habitats for species for which the site was designated. This may consist of non-intervention management via flooding or natural succession; but mostly active management measures will be needed as the site conditions are determined by human use, for example by embankment or former agricultural use. However, as discussed above, the Natura 2000 regime leaves quite some space for finding a balance between ecological dynamics and focused protection of habitat types and species. Recent research shows that the Netherlands has used many of these 'tools' to a large extent 160. Ecosystem considerations have played a role in the selection of Natura 2000 sites, priorities have been set in setting conservation objectives for Natura 2000 sites and for various Natura 2000 ecological dynamics have been incorporated in these conservation objectives as well. Some of these approaches are taken by the other countries as well.

The impression is that these approaches work well for most sites, but that difficulties and uncertainties arise particularly in relation to those sites where ecological changes are relatively extreme due to substantive past, present or planned human interventions. From this study such situations seem to be unique for the Netherlands in respect to the selected countries, which explains in part why dilemma B is less viewed as problematic by the involved respondents.

For instance, in respect of the Dutch Natura 2000 site Oostvaardersplassen, non-intervention management has deliberately been chosen as the dominant management approach for this site, but the ecosystem is relatively new and current knowledge indicates that the continuation of this management will result in deterioration of habitats or species for which conservation objectives have been formulated. Appropriate management measures must therefore be taken to avoid this deterioration according to article 6.2 HD, such as a reset of the hydrological system. Although it has not been the aim to conduct detailed case studies, negative effects resulting from measures under article 6.1 are not as such problematic as in principle these effects fall outside the scope of the term 'deterioration'. Furthermore, such ecological changes may, to a certain extent, be anticipated by an update of the conservation objectives in which new priorities are set. In addition, in light of the suggestions by English respondents, one could investigate whether potential negative effects for some bird species due to the reset could be anticipated by setting assemblage goals for groups of similar

Bastmeijer, K, 2017.

See Bijlsma et al., 2016. Inspiring natural landscapes in a crowded country. Five examples of nature-based solutions in Dutch landscapes.

bird species or by prioritizing objectives, but as explained above, some questions on the conformity of such an approach with the Natura 2000 regime arise.

In the case of the Grevelingen, the objective of the restoration plan is to make the ecosystem more stable and resilient by allowing more natural tide and increasing freshwater-saltwater gradients. Again, this is a relatively extreme situation where fundamental choices are made in respect of what type of ecosystem the management should be focused on. It may be necessary to take such a fundamental choice, taken into account the current and potential future contribution of the site to fulfil the national Natura 2000 objectives. If this decision is only based on ecological consideration in light of these objectives, updating the implementation system in respect of this site (e.g., the SDF, etc.) may well fall within the legal framework of Natura 2000. This may particularly be true if the measures are needed to fulfil the obligations of the Water Framework Directive.

Thus, even in these two relatively extreme cases there seems to be legal space to adapt the Natura 2000 implementation (e.g., the conservation goals) in the light of establishing a more natural and robust ecosystem. The bottom line is to guarantee for all habitat types and species that are present in the site a favourable conservation status at the national. So, a solid substantiation of each restoration plan is a legal prerequisite.

As the integrity of the site is closely linked to the conservation objectives, a challenging question is if the conservation objectives should only be set for the list of natural habitats en habits of species for which the site was designated. A promising approach could be to incorporate more nature values in the designation decision. As we have seen are in Flanders also Annex IV species present in the site are incorporated in the conservation goals. In Austria landscape values are part of the site objectives. In any case the management (cf. article 6.1) in both examples is focussed on a 'more complete' ecosystem, although in impact assessments (cf. article 6.3) these countries show a different response. In the Netherlands the situation according to the setting of conservation objectives has recently changed. For habitat types and habitats of species with a very unfavourable state of conservation or with low area covered in the range, extra objectives were set in the designation decision. For example Annex I and II HD goals have been assigned to SPA's and vice versa bird goals to SAC's. In 2013 these so-called complementary goals have been removed from the designation decisions. Due to the entry into force of the Nature Conservation Act on January 1, 2017, the objectives of protected conservation sites ('beschermde natuurmonumenten') expired from the conservation objectives of 59 Natura 2000 areas. These approaches could have been of help to give better insight in the integrity of the site.

Strategically it appears valuable to study the possible added values of enlarging Natura 2000 sites or integrating relatively small existing sites in one much larger Natura 2000 site. Based on the legal framework as discussed in this study, such an approach might support the further strengthening of a good balance between space for ecological dynamics and a focused and effective protection of habitat types and species. For instance, the appearance and disappearance of habitat types or species in parts of such a new site (parts that previously would have had a separate Natura 2000 status) might be less problematic if such developments are a result of ecological dynamics. Large areas that also include 'site fabric', a term used in the English implementation system may also leave more space for the options discussed to address Dilemma A (e.g., more space for compensation). For the Netherlands this concept is certainly not new (the concept appears to be very similar to the concept of 'cement tussen de stenen' as used in the implementation practice of the Netherlands), however, it might well be that in the UK 'site fabric' relates to more and/or larger spaces and areas. Furthermore, an approach of larger Natura 2000 sites could create more chances for ecological restoration and, consequently, a faster fulfilment of the conservation objectives. And as discussed, this may eventually be the most promising strategy to limit both dilemma's.

Annex 1 List of respondents

Austria:

- Volker Mauerhofer, Lecturer at University of Vienna.
- Hermann Hinterstoisser, policy advisor for nature conservation at the Government of Salzburg.

Flanders:

- Hendrik Schoukens, Phd at the University of Gent.
- Wouter Faveijts, policy advisor at ANF (the Flemish Agency for Nature en Forests).
- Thomas Defoort, policy advisor at ANF (the Flemish Agency for Nature en Forests).
- Karolien Vankerckhove, policy advisor at ANF (the Flemish Agency for Nature en Forests).

England:

- Christina Cork, policy advisor at Natural England.
- Steve Clifton, policy advisor at Natural England.
- Wilbert van Vliet, policy advisor at Natural England.
- Caroline Chapman, director of DTA ecology.

Interview format for Annex 2 respondents

INTRODUCTION

- 1. What is your current role in the Natura 2000 regime (policy, legal advice, etc.)?
- 2. At what level of governance have you been involved (national, lander, provincial)?
- 3. In what type of activities related to Natura 2000 have you been involved?

II. POLICY & CONCEPTS

General questions on the implementation of Natura 2000 in your country

- 4. Does your countries implementation system make clear for which species and habitat types a site has been designated?
- 5. Do all designated sites have explicit conservation objectives?
- 6. Has in your country the 'favourable conservation status' of species and habitat types been worked out in more detail? If so, at what geographical level?
- 7. Is the term 'deterioration' of Art. 6(2) interpreted in light of these conservation objectives?
- 8. Is the term 'integrity of the site' of Art. 6(3) interpreted in light of these conservation objectives?
- How do you deal with the precautionary principle in relation to deterioration and integrity of the site?

III. QUESTIONS RELATING TO DILEMMAS

Dilemma A) Nature & Economy

How to ensure positive effects for nature by integrating economic projects and nature development/restoration within the framework of Art. 6 HD

In the Netherlands project initiators have regularly tried to prevent 'significant effects' of a plan or project under Article 6(3) HD by also taking positive measures for nature. These measures were presented as 'mitigation' under 6(3), also when these measures where not preventing the direct effects on the site but were in fact compensating these effects. In recent cases (C-521/12 Briels and Others v Minister van Infrastructuur en Milieu and C-378/15 + 388/15 Orleans and others v Vlaamse Gemeenschap) the EU Court of Justice has made clear that in such situations Article 6(4) should be applied. Although the Court's reasoning is very logical, the mitigation approach could in practice constitute a stimulus to establish positive effects for nature that would go beyond the minimum requirements of compensation.

This raises the question whether there are approaches in implementing/applying Article 6 HD that facilitate positive impulses for nature development/restoration when developing a plan or project and how much space the regime of Article 6 Habitats Directive leaves for such approaches.

- 10. Was/is there in your country in the context of the Natura 2000-regime a practice/example of taking positive measures for nature as part of an economic plan or project?
- 11. If these plans of projects require an authorisation, under which conditions (mitigation or compensation, in relation to the aspect of time and location) are they licensed?
- 12. Has this practice been reviewed after the Briels and Orleans Cases of the ECJ?
- 13. Does your country apply programmatic approaches where positive measure for nature are scaled up and also the appropriate assessment is applied to the programmatic approach instead of the individual activity?

Dilemma B) Natural processes & negative effects on conservation objectives

How to cope with natural ecological processes or restoration measures which are considered positive for certain Natura 2000 values, while these processes/measures will result in negative effects for or even the disappearance of certain other Natura 2000 values in the Natura 2000 site.

Projects for nature restoration may be subjected to an appropriate assessment under Article 6(3) if not all components of the project are necessary for the management of the site as meant in article 6(3). On the one hand, such restoration projects may play a fundamental role in achieving the conservation objectives of the relevant Natura 2000 site and may in fact be required under Article 6(1) or 6(2). On the other hand such projects may also result in a significant effect under 6(3), for instance when the state of conservation of certain Natura 2000 habitats or habitats of Natura 2000 species would be affected.

Allowing for natural dynamics in Natura 2000 may under certain conditions (e.g., sufficient size, good environmental conditions, etc.) result in a better functioning of the ecosystems as a whole and may also increase the chances of successful and robust biodiversity protection and restoration. However, these dynamics may also result in the loss of certain natural habitats or habitats of species for which a Natura 2000 site has been designated.

European case law raises the question whether such loss or deterioration due to ecological processes is allowed under the Natura 2000 regime (see, e.g., for example ECJ C-6/04 Commission vs UK/Gibraltar. It is clear that, in implementing Article 6(2) of the Habitats Directive, it may be necessary to adopt both measures intended to avoid external man-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in Natura 2000 sites to deteriorate.

- 14. Do you know an example/practice where natural ecological processes or restoration measures for certain Natura 2000 species and/or habitats had negative effects for other Natura 2000 species and/or habitats?
- 15. Concerning restoration: If the ecological changes are planned as a result of active human intervention, do potential negative effects receive a prior assessment based on 6(3)or on 6(2)?
- 16. Concerning natural processes: Do potential negative effects as a result of natural ecological processes receive a regular assessment based on 6(2)?
- 17. Could you explain for both situations whether/when potential negative effects will be considered as 'deterioration' under Art. 6(2)?
- 18. Could you explain whether/when potential negative effects in both situations will be considered as negative impacts on the 'integrity of the site' under Art. 6(3)? E.g. the relation between conservation objectives of the site and the integrity of the site.
- 19. Does the precautionary principle play a role in relation to the existing examples (other than by assessing economic plans and projects)?
- 20. What is the relation between ecological changes (resulting from measures or from natural ecological processes) and the management plan?

Annex 3 Case law from the Court of Justice of the European Union (CoJEU)

- C-6/04 Commission v United Kingdom (Gibraltar). Judgment ECLI:EU:C:2005:626.
- C-127/02 Wadden Vereniging and Vogelbescherming Vereniging (Waddensea). Judgment ECLI:EU:C:2004:482.
- C-141/14 Commission v Bulgaria. Judgment ECLI:EU:C:2016:8.
- C-157/96 The Queen v Ministry of Agriculture, Fisheries and Food and Commissioners of Customs & Excise (National Farmers' Union and Others). Judgment ECLI:EU:C:1998:191.
- C-159/99 Commission v Italy. Judgment ECLI:EU:C:2001:278.
- C-180/96 United Kingdom v Commission. Judgment ECLI:EU:C:1998:192.
- C-236/01 Monsanto Agricoltura Italy and Others. Judgment ECLI:EU:C:2003:431.
- C-241/08 Commission v France. Judgment ECLI:EU:C:2010:114.
- C-241/08 Commission v France. Opinion ECLI:EU:C:2009:398.
- C-258/11 Sweetman and Others. Judgment ECLI:EU:C:2013:220.
- C-258/11 Sweetman and Others. Opinion ECLI:EU:C:2012:743.
- C-301/12 Cascina Tre Pini. Judgment ECLI:EU:C:2014:214.
- C-304/05 Commission v Italy. Judgment ECLI:EU:C:2007:532.
- C-387/15 Orleans and Others. Judgment ECLI:EU:C:2016:583.
- C-399/14 Grüne Liga Sachsen and Others. Judgment ECLI:EU:C:2016:10.
- C-404/09 Commission v Spain. Judgment ECLI:EU:C:2011:768.
- C-404/09 Commission v Spain. Opinion ECLI:EU:C:2011:425.
- C-415/01 Commission v Belgium. Judgment ECLI:EU:C:2003:118.
- C-418/04 Commission v Ireland. Judgment ECLI:EU:C:2007:780.
- C-461/14 Commission v Spain. Judgment ECLI:EU:C:2016:895.
- C-461/14 Commission v Spain. Opinion ECLI:EU:C:2016:110.
- C-508/04 Commission v Austria. Judgment ECLI:EU:C:2007:274.
- C-521/12 Briels and Others. Judgment ECLI:EU:C:2014:330.
- C-521/12 Briels and Others. Opinion ECLI:EU:C:2014:113.
- C-535/07 Commission v Austria. Judgment ECLI:EU:C:2010:602.
- C-538/09 Commission v Belgium. Judgment ECLI:EU:C:2011:349.

List of references

- Adriaens, D., T. Adriaens, G. Ameeuw, 2009. Ontwikkeling van criteria voor de beoordeling van de lokale staat van instandhouding van de habitatrichtlijnsoorten. Instituut voor Natuur- en Bosonderzoek, Belgium. https://data.inbo.be/pureportal/nl/publications/ontwikkeling-van-criteriavoor-de-beoordeling-van-de-lokale-staat-van-instandhouding-van-dehabitatrichtlijnsoorten(a8756777-6d03-4019-b20e-1767d8af2de1).html
- Bastmeijer, K., 2017. Natura 2000 en zilte natuur in Nederland: De ruimte voor dynamische en veerkrachtige ecosystemen' ('Natura 2000 and marine and coastal natural areas in the Netherlands: Space for dynamic and robust ecosystems'), a study for WWF-the Netherlands, 2017.
- Bastmeijer, Kees, 2016. Natura 2000 and the protection of wilderness in Europe. In: Bastmeijer, Kees (Ed.), 2016. Wilderness Protection in Europe: The Role of International, European and National Law. Cambridge University Press.
- Bijlsma, R.J., C.J. Bastmeijer, M.E.A. Broekmeyer, R.J.F. Bugter, F.M. Fleurke, H.P.J. Huiskes en J.A.M. Janssen, 2012. Samenvoeging Natura 2000-gebieden; Juridische, bestuurlijke en ecologische (on)mogelijkheden, kansen en risico's. Wageningen, Alterra, Alterra-rapport 2348.
- Bijlsma, R.J. et al., 2016. Inspiring natural landscapes in a crowded country. Five examples of naturebased solutions in Dutch landscapes. Wageningen Environmental Research (Alterra) report 2754, Wageningen.
- Bouwma, I.M., D.A. Kamphorst, R. Beunen & R.C. van Apeldoorn, 2008. Natura 2000 Benchmark; A comparative analysis of the discussion on Natura 2000 management issues. WOt-rapport 90.
- Broekmeyer, M.E.A en M. Pleijte, 2016. Kansen en knelpunten bij de uitvoering van de Europese Vogelrichtlijn en Habitatrichtlijn; Zestien Nederlandse casussen in het licht van de Fitness Check en de ambities uit de Rijksnatuurvisie. Wageningen, Alterra Wageningen UR (University & Research centre), Alterra-rapport 2705. http://library.wur.nl/WebQuery/wurpubs/fulltext/376011
- Chapman, Caroline, 2016. The Nature Directives ... "Spirit-Crushing" or just poorly understood? An exploration of mitigation measures, derogations and political perceptions. In: The Habitats Regulations Assessment Journal (7):11-16 pp.
- Ellmauer, T. (Hrsg.), 2005. Entwicklung von Kriterien, Indikatoren und Schwellenwerten zur Beurteilung des Erhaltungszustandes der Natura 2000-Schutzgüter. Band 3: Lebensraumtypen des Anhangs I der Fauna-Flora-Habitat-Richtlinie. Im Auftrag der neun österreichischen Bundesländer, des Bundesministerium f. Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft und der Umweltbundesamt GmbH.
- European Commission, 2012. Commission note on the designation of special areas of conservation (SACs). Final Version of 14 May 2012. http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commi ssion_note_EN.pdf
- European Communities, 2000. Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/C
 - http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_e n.pdf

- European Union, 2011. EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones
- http://ec.europa.eu/environment/nature/natura2000/management/docs/Estuaries-EN.pdf
- European Union, 2013. EC Guidance on Wilderness in Natura 2000. Management of terrestrial wilderness and wild areas within the Natura 2000 Network. Technical Report - 2013 - 069. http://ec.europa.eu/environment/nature/natura2000/wilderness/pdf/WildernessGuidelines.pdf
- Geitzenauer, M., Hogl, K., Weiss, G., 2016. The implementation of Natura 2000 in Austria. A European policy in a federal system. Land Use Policy (52) pp. 120-135.
- Gerald Louette et al., 2013. Staat van instandhouding (status en trends) habitattypen en soorten van de Habitatrichtlijn (rapportageperiode 2007-2012). Instituut voor Natuur- en Bosonderzoek, 2013.
- Heilingbrunner. Dr Gerhard, DI Josef Schrank, Mag. Domenico Savio, Mathilde Stallegger, MSc, 2014. Natura 2000-Ausweisung & -Gebietsverordnungen - Analyse des Ausweisungsstands und der Verordnungspraxis in Österreich.
- Letter of Nicola Notaro, 2015. ENV.B.3/NN/sp Ares(2015)517965. https://www.tweedekamer.nl/kamerstukken/brieven_regering/detail?id=2015Z25070&did=2015D 50676
- Mauerhofer, Volker, 2015. Vorhabensprüfung und Maßnahmen für Natura 2000-Schutzgebiete. In: Recht der Umwelt (5):186-193.
- Ministerie van EZ, 2014. Natuurlijk verder. Rijksnatuurvisie 2014. Den Haag.
- Ministerie van LNV, 2000. Natura 2000 Doelendocument.
- Ministerie van I&M, 2014. Ontwerp-Rijksstructuurvisie Grevelingen en Volkerak Zoommeer http://www.zwdelta.nl/projecten/rijksstructuurvisie-grevelingen-volkerak-zoommeer.htm
- Natural England, 2015. The Habitats Regulations: Natural England's approach to considering habitat creation within a European site as mitigation following the Briels judgement. External note, 2 pags.
- Natural England, 2015. The Habitats Regulations: Natural England's approach to considering habitat creation within a European Site as mitigation following the Briels Judgment. External note.
- Schoukens, Hendrik, 2014. Het vernieuwde Natuurdecreet: a Game Changer?. In: TOO (nr. 4):474
- Staatsbosbeheer, 2011. Managementplan Oostvaardersplassengebied 2011 -2015. Date 12 april 2011.
- Tjollyn, F., H. Demolder, S. De Saeger, A. Leyssen, A. Thomaes, J. Wouter, 2008. Instandhouding van de Natura 2000 habitattypen - versie 2.0. Instituut voor Natuur- en Bosonderzoek, Belgium. https://data.inbo.be/pureportal/nl/publications/ontwikkeling-van-criteria-voor-de-beoordelingvan-de-lokale-staat-van-instandhouding-van-de-natura-2000-habitattypen(a40ff58c-d24a-4ddf-98ed-4a74c0e46986).html
- Welsh Government, 2009. Technical Advice Note. 5: Nature Conservation And Planning. http://gov.wales/docs/desh/policy/100730tan5en.pdf

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