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D2.2 Policy drivers of land use/landscape change and the role of Institutions

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VISIONS OF LAND USE TRANSITIONS IN EUROPE

D2.2 Policy drivers of land use/landscape change and the role of institutions

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1 Summary

This Volante deliverable D2.2provides an overview and comparative analysis of the transposition and implementation of the two European policies: the Habitats Directive (HD) and the agri-environmental schemes (AES) under the second pillar of the common agricultural policy (CAP), and the role that institutions play in these processes. The report is based on the country reports from the case study countries (Netherlands (NL), Greece (GR), Romania (RO), Austria (AT) and Denmark (DK)). Each policy is analysed in separate parts of the deliverable and the results are compared in the common discussion and conclusion of report.

Both policies have been characterized according to a framework based on the type of policy intervention in question (regulatory, economic, advisory,) and addressed area of intervention (governance structure) in order to approach the subject of the policy (hierarchy, market, self-organized).(Theesfeldt et al 2010). This is supplemented by indicators of institutional fit, according to a typology made by Knill and Lehmkuhl (2002), defining three 'Europeanization mechanisms' that may be used or may define the level of change in domestic regulatory styles and structures required by regulations and directives that are implemented in member states:

- institutional compliance (requires changes of domestic institutional arrangements in order to assure the correct institutions are in place in order to implement the policy/legislation)
- changing domestic opportunity structures, (requires changes in existing domestic institutions that would otherwise be in contrast to the implementation of new regulation, however no specific and mandatory institutions are defined in order to implement the legislation, but certain options may be excluded from policy choices)
- framing domestic beliefs and expectations (no specific demands required in order to implement the legislation)

Second, the EU policy transposition styles in each case study country are characterized according to a typology of compliance cultures in Member States in the EU (Falkner et al. 2007, Falkner and Trieb 2008). The following "worlds of compliance" are represented in the typology:

- Worlds of law observance: the compliance goal typically overrides domestic concerns; transposition happens in due time and transposed policies are correct and complete.
- Worlds of domestic policies: EU law observance is one priority amongst many. Transposition depends on potential conflicts with national goals – if no conflict, transposition is smooth.
- Worlds of transposition neglect: compliance is not a goal in itself. Without supranational powerful action, transposition obligations are not recognized.
- Worlds of dead letter: systematic contestation at transposition stage but timely transposition, and non-compliance in application and enforcement.

Based on the study we conclude: The theoretical framework for analysis of the policies has been adequate.

The Habitats Directive is a regulatory type of intervention, laying down mandatory regulatory instruments for the conservation of the European nature, through area designations and requirements to protections against deterioration as well as pro-active conservation. It works through the domestic administrative structures, but leaves the lay-out of the management structure to the national discretion.The implementation mostly intervene at market mechanisms by putting restrictions to land use: preventing

certain projects and activities to take place in or near protected areas. Instruments to pro-actively protect or restore habitat quality are also partly market based, but often found in other policy programs, such as compensation to land owners, who are participating to fulfil the directive, through the agri-environmental measures in the Rural Development Program under CAP. However, restoration projects that do not intervene on the markets also take place, funded by LIFE or domestically financed restoration projects.It is characterized as a policy that requires 'institutional compliance' in the member states, in order to be implemented.

The AES is defined as an economic type of intervention, which intervenes at markets by offering the farmer economic compensation on a voluntary basis. Well-functioning advisory services may facilitate uptakes and understanding of the best possible implementation of the required agricultural practices on the agreement areas. The policy is characterized as a policy of 'changing domestic opportunity structures', since it offers an alternative to the price support of agricultural products. A more vague interpretation of the policy would characterize it as 'framing domestic beliefs and expectations', since it does not interfere with how schemes are implemented, and there are no predefined subjects that need to be covered by the schemes. This however depends on the case country in question.

Following a classification according to the 'worlds of compliances', it turns out that the identified worlds of compliances are not the same for the two policies in the case study countries, while there are still some similarities to the Falkner categorisation. The characterisation per country probably depends on whether the implemented policy is regulatory or compensatory, and whether the policy implies national strict requirement for a mandatory institutional style or the policy barely demands changes of domestic institutions/ constitutes a framing of domestic beliefs and expectations.

The characteristic reveals cases of countries that follow a specific set of rules relatively strictly, whereas others oppose a strict set of rules or fit them to domestic policies. The same countries that comply with a set of rules very strictly, however acts less compliant when the frame is defined less strictly, and the countries that apply a domestic policy approach to specific institutional rules manages to comply well to the broader formulated policy.

Eventually the results serve as inputs to a roadmap to EU policy development, concerning policies affecting land use and/or landscape development. Inputs to the roadmap are categorized according to five categories:

1. *European level procedural issues for selection of policy option*
2. *European level policy issue, to be addressed in relation to different policy options*
3. *European level preparation of implementation of policy option*
4. *European level issues while implementing of a policy option*
5. *Domestic government framework*

1   General introductionto the deliverable D2.2

The present deliverable 2.2 for the Volante project consists of this common introduction to the deliverable, containing an overview of the structure of the report, serving as a reading guideline, an introduction to common theories used in the study and a disclaimer concerning the status of the work and intended further work in the project within the frame of scientific papers for publications in journals. This is followed by the reporting of the two policy cases selected: the Habitats Directive and the agri-environmental policy under the CAP 2nd pillar.

According to the project plan, the task P-2.2 objectives were:

Task P-2.2: Historical analysis (NERI-AU with UCPH, Alterra-LEI) – Collect data on sample cases (focusing on EU15 because of longer EU history), including visits and interviews with inhabitants, civil servants and other stakeholders, and with policy makers to determine:

- *What are the effects of recent changes in agricultural subsidy systems, in particular of the Common Agricultural Policy, on the European land system?*
- *How do institutions that shape agriculture, forestry and nature policies affect patterns in demand for ecosystem services and land system change?*
- *How do agreements and conventions (Natura 2000, Water Framework Directive, etc.) influence land system dynamics?*

The output was:Report on land systems policies, trends and the importance of institutional agreements.

Land system policy not a well-defined concept. We have focused on policies that either directly addressed land use in their objectives, or indirectly, where land use change could be foreseen as a probable effect of objectives and instruments chosen.

The assumption behind the approach taken in the study is that for EU policies to have an impact on the changes in land use and landscapes, it is crucial that they are adequately transposed, implemented and enforced - hence assigning a potentially crucial role to domestic institutions. This implied that the scope of the study became to understand the transposition and implementation processes of land use affecting policies and the institutional barriers and potentials affecting the outcomes.

Based on the literature review of EU policy implementation it became clear that to properly study this role, it was not sufficient to focus on the EU level, but that domestic institutions also needed to be addressed, in order to investigate differences in implementation across different policy and implementation cultures. An approach based on country studies, including stakeholder interviews were consequently selected, but due to resource constraints it was necessary to limit the number of policy-cases to two. The Volante project decided to make biodiversity a priority issue, and consequentlyit was decided in this task to include the Habitats Directive as a case policy. This also had the advantage that it had a 20 years implementation history, and that the implementation was afflicted by numerous delays in domestic responses, hence presenting a seemingly appropriate case for studying institutional barriers and successes. In addition, the Directive presents one of the first EU policies to propose management plans, which were later taken up as a requirement in e.g. the Water Framework Directive.

One of the important issues addressed in state-of-the art research on institutional aspects of policy implementation is policy integration.We decided to focus on the agri-environmental policies in the CAP rural development pillar as representing a policy building on subsidies, due to the development in the

scope of the schemes, which increasingly addressed integration with other environmental policies. This instrument has a history corresponding to the Habitats Directive, and consequently development in policy integration at the EU and domestic level could then be studied. The Water Framework Directive and forestry policies have not been studied as policy cases, but have been addressed where relevant in interviews in order to investigate the potential integration with the Habitats Directive planning processes.

The substantial part of the deliverable is structured in two main parts. The first part describes the barriers and the role of institutions in the transposition and implementation of the Habitats Directive (HD). This report is written by senior researcher Pia Frederiksen, Department of Environmental Science, Aarhus University, based on the country reports from the case study countries (Netherlands (NL), Austria (AT), Greece (GR), Romania (RO) and Denmark (DK)).

The second part describes the barriers and the role of institutions in the transposition and implementation of the agri-environmental schemes (AES) under the second pillar of the common agricultural policy (CAP), maintaining a structure similar to the report on the HD, and using the same countries as case material. This report is collected by Post Doc, Jens Peter Vesterager, University of Copenhagen.

Austria was not originally part of this Volante work package, but the Austrian partner decided to allocate some resources to participate in the study. While the Austrian reports are naturally not as comprehensive as for the other partners to the WP, we are thankful that it was possible to analyze some trends also in this country.

The two parts of the present reportconstitute individual contributions to the WP2.2, and can be read as individual papers; however they serve as a common deliverable D2.2, and will be used for common publication. Each part has its own introduction, referring to relevant theories; this may cause repetition of some explanations or theories.

The two parts are followed by a short common discussion, on how the outcomes of the two individual analyses may be interpreted in a common framework, and how results differ or accentuate observations on individual cases/ groups of countries. This is based on the theoretical framework presented later in this initial introduction. In addition,inputs to a future road map for EU policy development, concerning policies affecting land use and/or landscape development are proposed.

This discussion is followed by a literature list for this deliverable D2.2; the main body of references are however included in the country reports, on which this work build. Moreover, annexes contain:

• Guidelines for the document analyses (Annex 1)
• Guidelines for the interviews made to verify the observations from the document analysis (Annex 2)
• Reports for each country (HD and AES(CAP)) (Annexes 3-7)

The analysis in this deliverable builds on a theoretical framework drawing on three theories/analytical frameworks, which are briefly summarized below.

1. Theesfeldt et al (2010).

This framework for policy analysis is developed as part of a procedure for assessing institutional compatibility in relation to ex-ante policy assessment. It provides a framework of relevant policies based on the type of policy intervention in question(regulatory, economic, advisory,) and which area of intervention

needed to be addressed (governance structure) in order to address the subject of the policy (hierarchy, market, self-organized).

As a supplement to this characterization of policies, with corresponding indicators of institutional fit, the typology of Knill and Lehmkuhl (2002), defines three mechanisms that may be used or may be defined in regulations and directives that are implemented in member states.

- institutional compliance (prescriptive; requires changes of institutional structures in order to assure the correct institutions are in place in order to implement the policy/legislation)
- changing domestic opportunity structures, (requires a change in existing domestic institutions that would otherwise be in contrast to the implementation new regulation, however no specific and mandatory institutions are defined in order to implement the legislation)
- framing domestic beliefs and expectations (no specific demands required in order to implement the legislation)

Following this first level analysis of 'Europeanization mechanism' (ibid), the authors outline a decision tree structure of the likelihood of domestic success or failure of policy implementation, depending on the existing domestic institutional structure and interest constellation.

2. Falkner et al. (2007) and Falkner and Treib (2008) have developed a typology for compliance cultures in different Member States to the EU, in terms of transposition of EU policies. Based on studies of European labor laws they identify four types:

- Worlds of law observance: the compliance goal typically overrides domestic concerns; transposition happens in due time, and transposed policies are correct and complete.
- Worlds of domestic policies: EU law observance is one priority amongst many. Transposition depends on potential conflicts with national goals – if no conflict, transposition is smooth.
- Worlds of transposition neglect: compliance is not a goal in itself. Without supranational powerful action, transposition obligations are not recognized.
- Worlds of dead letter: combinations of political contestation at transposition stage but timely transposition (dependent on the political constellations among domestic actors), and quite systematic non-compliance in application and enforcement.

3. Last, Liefferink et al. (2011) combines aspects of the theories of fit and misfit and world of compliances. This leads to a 'Pathway for implementation and dimensions of a domestic impact'. They argue that the fit/misfit hypothesis should not just be rejected ('throwing out the baby with the bathwater') but supplemented with more focus on the domestic situation and politics.

These contributions constitute elements of a framework for developing inputs to a so called road map for future policy change in the EC. Using this as a basis for the study, we aim to point to how institutional transposition and implementation barriers can be identified and how misfits may be overcome - likely to be good inputs for future developments of European land use related policies.

This deliverable is not the final WP2.2 contribution to the Volante-project. Further work is carried out in two directions:

1) To develop further the implications of the findings for the Volante Roadmap, and

2) In subsequent analyses and discussion of theoretical implications; however, in the form of papers for publication in scientific papers.

The planned work includes:

- A paper on policy drivers of landscape change and the role of institutions, based on the study of the implementation of the Habitats Directive
- A paper on the history of AES implementation and consequences to current institutional dynamics of this policy
- A paper on at least one of the cases contributing to the understanding of the institutional barriers from EU to the farmers and actual landscape changes

As such, this deliverable should be read as a first analysis of results from the Volante project on observations of relevance to WP2.2 - a work that will be continued over the coming months.

2 Study of the Habitats Directive: Introduction and research objectives

This present study has been carried out under the Volante project's Module Processes, devoted to the study of processes of land use and landscape change in Europe.

One aspect of the drivers of change in land systems of Europe, concerns the processes influencing the implementation of European policies that aim - directly or indirectly - to change the land use and/or landscapes in European regions. Agricultural, forestry, and other sectorial policies affect the land use and landscape in multiple complex direct and indirect ways, and there is little doubt that for instance the agricultural policies, as they have been adopted during the recent decades in the Common Agricultural Policy (CAP) framework, have had a major impact on the landscape due to their impact on the framework conditions for farming systems and for decisions on land use and management. Structural changes leading to adoption of new technologies, intensification and farm enlargement have in general affected the landscape. E.g.merging of fields and removal of smaller habitats and landscape elements in some countries and regions, to make way for introduction of larger agricultural machinery have enlargedthe grain size and homogenised the landscape. In other areas and regions land abandonment and resulting afforestation have taken place. Transport infrastructure and urban development constantly make new claims to the land - with ensuing consequences for fragmentation and homogenization of nature types and land use.

In response to this development, European environmental and nature policies seek to enforce legislation and tools in member states to promote sustainable land use e.g. for biodiversity, water resources and aquatic and soil quality. These policies aim at protection at the landscape scale, pursued through two main types of policy instruments: The first is an increasingly spatial planning approach to environmental protection and management, enforced through area designations with specific requirements, such as the habitat protection through the designation of N2000 areas for protection of habitats and species of European value - or in softer versions the furthering of green network/corridor concepts, but also through the encompassing concept of river basin management planning in water policy. The other is to improve policy integration, exemplified by the agri-environmental section of the agricultural policy, which subsidizes for instance extensification of agricultural land use and management, for the benefit of multifunctional provision of food, fodder and ecosystem services.

For policies to work as effective drivers of land use and landscape change it is however imperative, that they are not only transposed to domestic policy, but also that they are administratively implemented, applied, enforced and taken up by farmers and other land managers. However, environmental policies are not always successfully implemented, as documented by the number of infringement procedures related to the environmental policy field (e.g. Etherington 2006).

The lack of implementation can derive from a variety of processes and interaction on the pathway from EU policy through domestic politics and the domestic governance framework to real outcomes and impact (see Figure 1).Scholars use the concept of Implementation in slightly different ways; in some studies implementation covers the whole range of processes from administrative implementation to application and enforcement, while others separate the processes. In the present study we focus mainly on the transposition and the ensuing domestic implementation processes where adaptation in governance frameworks may take place as changes to the administrative set-up, and in the choice of instruments and measures, but we will also touch upon the application and enforcement of the policies.

Figure 1: schematic life cycle of a directive (after Etherington 2006)
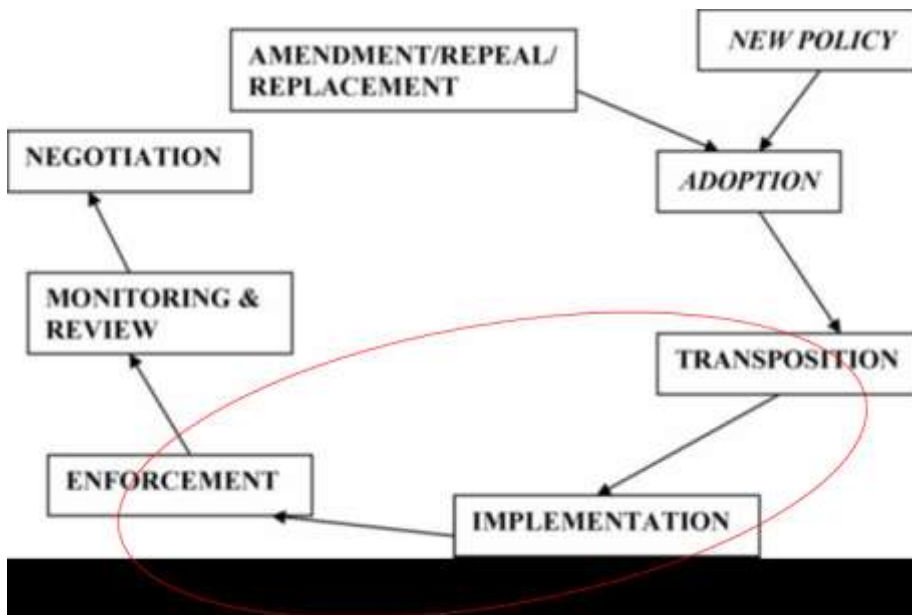
We aim to elucidate the role that domestic institutions play for a successful transformation of EU policies to expected outcomes by investigating the transposition of cases of environmental and nature protection policies to domestic governance frameworks, and the barriers met in the implementation of these.

Research objectives are:

› To explore the role of domestic institutional arrangements and processes for the transposition and implementation of EU policies aiming at land use/landscape regulation and management – investigated through the Habitats Directive and the CAP agri-environmental measures.
› To investigate the barriers for implementation in a multi-level, multi-sector and multi-actor perspective

The Habitats Directive was selected as a result of priorities in the overall Volante project, and the agri-environmental policy served as a means to also address issues of policy integration.

2.1 Background

Looking for an analytical framework that would help us investigate possible barriers for the transformation of EU policies to real outcomes, we found inspiration in two bodies of literature. The first consist of studies of compliance to EU policy and critical aspects forimplementation. The second was concerned with the development of a method for ex-ante institutional assessment of policy options as an input to the ex-ante impact assessment procedure in the EU.

Compliance and implementation studies

Lack of compliance and implementation failures and successes have been studied extensively,and reviews of the field were carried out by Mastenbroek (2005) and Etherington (2006).

Following Mastenbroek (2005), the first phase of studies (late 1980ies) explored a variety of factors which could possibly explaina lack of compliance with EU policy, focussing mainly on legal, administrative and economic reasons, such as the quality of the legislation, the administrative capacity of the member states, and the economic compliance costs (see also Etherington 2006). In the late 1990s studies were increasingly inspired by theories of Europeanization and neo-institutionalist theory (Mastenbroek 2005). In this approach, the nature of the domestic structures were central, and the complexity, the degree of multilevel governance, or the extent to which the EU policy approach 'fit' the domestic structures and instruments, were seen as critical to a smooth implementation.

The 'fit/misfit' theory guided a number of studies - with the key hypothesis that compliance is hindered by a lack of fit between European policy requirements and existing domestic frameworks, with the distinction of 'policy misfit', concerned with the content of the policies, and 'institutional misfit', concerned with the regulatory style and structure of a policy area(Knill and Lenschow 1998). Regulatory style was interpreted as the various regulatory arrangements between interventionist and more mediating forms, while regulatory structures focussed on the vertical distribution of roles and responsibilities (centralization/decentralization) and the horizontal aspect of distributed vs concentrated authority over a policy area.

Later, Knill and Lehmkuhl (2002) argued that an important determinant for successful implementation was related to the type of Europeanization mechanism used by the EU policy. They distinguish between three types. Firstly the institutional compliance mechanism, which uses a regulatory approach building on command and control mechanisms, such as emission limits. The second mechanism is to change domestic opportunity structures, e.g. by offering subsidies or by imposing taxes. Thirdly, policies can use mechanisms that aim to shape domestic beliefs and expectations. Examples are 'strategies' (sustainable development strategy) or 'perspectives' (European Spatial Development Perspective).

Based on these mechanisms the authors set up an analytical framework, which accounts for the diverse patterns of adaptation across policies and countries. A first step looks at the distinctive Europeanization mechanism used by an EU policy, and if it warrants a pressure for domestic institutional adaptation. This step guides theanalysis into differentiated approaches, which depend on the results of the first step: to investigate institutional compatibility and possible persistenceor to investigate domestic interest constellations and opportunity structures. As Etherington (2006) notes, EU environmental policy primarily works on the lines of the institutional compliance approach; thereby having more or less deep repercussions for domestic institutional arrangements.

The fit/misfit hypothesis have been criticised for rather disappointing empirical verification (Mastenbroek 2005, Falkner 2007), and based on a quantitative study ofthe transposition of 6 European Union labour laws, Falkner et al (2007, 2008) argue that neither the fit/misfit hypothesis nor other more or less prominent theoretical approaches, such as the veto-player approach (in which the number of veto players in the transposition process is seen as mediating factors), yield satisfactory explanations to the differentiated transposition of the labour laws. Exploring their data more inductively, they do find certain patterns of compliance (understood as modes of treating transposition duties) among the countries, which indicate that different policy cultures of compliance may exist. Based on their analyses they identify first three (Falkner et al 2007), and later, based on an extended study, which includes newly accessed countries, four (Falkner and Treib 2008) 'ideal' compliance types, within which different factors may be constituent for the outcome. These are characterised as follows:

1. Worlds of law observance: the compliance goal typically overrides domestic concerns; a) transposition happens within due time, b) transposed laws are well-considered and well-adapted to specific circumstances, and c) enforcement agencies as well as court systems are well-organised and equipped with sufficient resources to fulfil tasks. Non-compliance happens rarely, and in this group of countries, the national compliance culture can explain most cases.

2. Worlds of domestic policies: EU law observance is one priority amongst many. Transposition depends on potential conflicts with national goals – if no conflict, transposition is smooth. If conflict, non-compliance is likely to prevail, hence, the specific fit with political preferences plays a main role.

3. Worlds of transposition neglect: compliance is not a goal in itself. Without supranational powerful action, transposition obligations are not recognised. National 'arrogance' (indigenous standards superior) may also support this position, as well as bureaucratic inefficiency.

4. Worlds of dead letter: systematic contestation at transposition stage but timely transposition, and non-compliance in application and enforcement.

The results from Falkner et al (2007, 2008) predominantly derive from the study of the transposition processes, and they argue that this typology may form a relevant filter for deciding which theoretical factors should have focus for explaining implementation processes. In this way, they arrive at an analytical framework in which countries are firstly distinguished according to the 'culture of compliance', as this will guide which factors may be most relevant to investigate further on.

A framework for ex-ante impact assessment of institutions

As participant in one of the large EU FP6 research projects (SEAMLESS) that studied methods and tools for ex-ante impact assessment of policy options, Theesfeld and co-workers set out to supplement the methods developed with a procedure for institutional compatibility assessment (PICA) (Theesfeld et al 2010). This procedure is based on the assumption that the effectiveness of a policy is dependent on the degree of compatibility between the policy and the institutional context in the countries and regions for which it is conceived, i.e. basically the fit/misfit hypothesis (Theesfeld et al 2008). The study and procedure is concerned with domestic processes, and does not focus on the transposition process. Hence, the framework would tentatively provide clues to which factors should be addressed for an analysis of domestic institutional barriers to implementation.

The approach identify four categories of factors,which serve to understand the compatibility of a given policy option to existing institutional arrangements (Theesfeld et al 2010) – partly derived from the Institutions of Sustainability framework (Hagedorn 2008). The first is the formal and informal rules that shape the actor related incentives and thus determine their behaviour in a particular situation. Whether a new institution becomes effective, depends on the overall incentive structure that actors face, including existing - possibly countervailing - rules or policies. The second is if suitable governance structures exist, which are necessary to make new rules effective, that is, to supervise actors and to sanction actors' non-compliance. Third is how/if the design of new institutional arrangements corresponds with actors' characteristics, including values and belief systems, access to resources and competencies. The fourth category is the characteristics of the transactions targeted by the policy in question.

The PICA procedure show similarities to the approach of Knill and Lehmkuhl (2002), by firstly addressing the policy type, here described as a combination of the type and area of the intervention - where type of

intervention can be regulatory, economic or advisory/voluntary, and the area of intervention (governance structure) is directed to hierarchy, market or self-organised network. Hence, matrix combinations of these characterise the policy type, such as policies that intervene at hierarchies using regulatory instruments, or policies that intervene at markets using regulatory instruments, etc., see table 1. Theesfeld et al. include a third dimension being the influence on property rights, which have implications for the adaptability.

Table 1: Framework for assessment of policy type

Policy type	Type of intervention		
Area of intervention (governance structures)	regulatory	economic	advisory/ voluntary
Admin. hierarchies			
Market			
self organised networks			

In their procedure, the actual assessment is in a following step carried out based on a kind of check list ofcritical institutional aspects. For our purposes, the steps characterising the EU policy is the interesting part, as it point out the policy characteristicson which to focus, when determining the type of Europeanization process to look for in the analyses at the country level.

3   Research questions and analytical framework

Based on the results and discussions addressed in literature, we operationalized the research objectives in the following research questions:

1) How can the selected policies be characterised (Europeanization mechanism/type of intervention)?
2) Which compliance patterns can be identified for the transposition of the environmental policies studied?
3) Which adaptations in the governance structure and distribution of roles and responsibilities have taken place following the transposition of policies investigated?
4) Which instruments and measures have been conceived for the implementation, are they adequate, and do they represent major changes in domestic approachesor target groups
5) Are implementation objectives aligned with financial and other resources?
6) How do policy implementation actors and stakeholders perceive the implementation, and which main barriers do they identify?
7) Do transposition and implementation differ between the countries studied, and how can potential differences be explained?

3.1   Data and methods employed

The study is divided into three steps: 1. European level characterization of the policies selected, 2. National level analysis of the transposition and the adaptations to the institutional settings in selected countries, and 3. Cross-cutting analysis revealing and explaining differences and similarities between countries.

The policy cases selected are firstly the Habitats Directive, which was adopted in 1992. This directive has a section concerning the protection of habitats, and on the protection of species, and it covers terrestrial as well as marine ecosystems. In the present study we concentrate on the articles that concern the terrestrial

habitats, as they are potentially the main drivers of land use change. The second policy case is the CAP pillar 2 - i.e. the Rural Development Policy, which is designed around three axes of which one is specifically aimed at environmental issues, thereby presenting a case of potential policy integration in relation to the Habitats Directive.

The characterization taking place in the first step is carried out using the distinctions made by Knill and Lehmkuhl (2002) and Theesfeld (2010). Hereby, the mechanism used is characterized as working on the institutional compliance, the domestic opportunity structures or on the general framing of the policy area. Moreover, it is investigated if the policy could be expected to work on administrative hierarchies, or if it will mainly act on the market mechanisms or on policy actors (see also table 1 above). This analysisis based on an analysis of documents mainly from EU level, and addresses the first research question.

Secondly, the domestic institutional settings and the implications of the policy implementation for institutional structures and instruments are analysed in country studies. This addresses research questions 2-6. The involved countries are: The Netherlands, Austria, Romania, Greece and Denmark. The selection is basically pragmatic - being the mother countries of the partners involved; but this also constitutes a selection, which represents the four compliance cultures identified in the labour law study by Falkner (2008). In that study Denmark was classified in the law observance category, the Netherlands and Austria in the 'domestic policies' category, Greece in the category of 'transposition neglect' and Romania would tentatively (as the study was carried out on four accession countries not including Romania) belong to the category 'world of dead letter'.

The data for this section has been collected using two methods: analyses of documents and literature concerning the domestic transposition and implementation in each involved country, supplemented by interviews with relevant stakeholders to this process; civil servants at relevant levels: central (CA), regional (RA) and/or local administrations (LA), non-governmental green organisations (NGGO) and other stakeholder organizations, e.g. agricultural organisations (NGAO), if relevant. The respondents were asked questions to cross-check the information from the document analyses, but with a focus on their perception of the sufficiency of the legislation and the measures taken, the clarity of the administrative structure in terms of roles and responsibilities, and the perceived barriers to implementation.

Data was collected using a common framework for document analysis and a common guideline for semi-structured qualitative interviews in each country. These are enclosed as Annex 1. Analysis and interviews were carried out by country experts participating in Volante, and reports summarizing the results of the document analysis and the ensuing interviews were produced as background material for the present report. The country reports are enclosed as annexes 3-7.

Thirdly, the cross-country analysis compares the analytical themes across the countries and discusses the processes and causes of delays in transposition and the degree of misfit, using the information and analyses provided by partners in the country reports. Moreover, the analysis seeks to derive issues, which have a broader relevance by contributing to knowledge-building of the effectiveness of environmental and nature policies and the barriers for implementation and outputs.

3.2 Analytical framework for the country studies

The country studies focus on transposition, institutional implementation and aspects of application and enforcement of the policy. For all themes this includes both the formal description (based on document analysis) and the stakeholders' perception of process – including barriers to transposition and enforcement.

Transposition

First the compliance patterns in the case countries are analysed. Hence, the second research question is explored by investigating the transposition of the EU legislation into the domestic policy framework in each of the countries. The themes analysed are:

› Timeliness of the transposition
› Correctness and completeness of transposition
› Possible barriers to transposition and how these have been met
› Stakeholders' perception of the legal framework in terms of its sufficiency and complexity

Institutional Implementation

Next, the regulatory frameworks and the governance structures and mechanisms are analysed. It is investigated if changes to the legal framework take place as a consequence of the transposition of the EU policy, if the organisational structures changes as a consequence of implementation, and if the institutional regime and the instruments and levels of governance change as a consequence of the requirements in the EU policy.

Hence, the third to fifth research question is addressed by investigating the implementation structures, adaptations and mechanisms, as described in legal texts, in documents related to policy preparation, -implementation and -evaluation, and in scientific literature. Interviews are used for supplementing the information from the documents. The central questions are:

- What is the design of domestic institutional frameworks for nature conservation and how is it adapted following the transposition of the Habitats Directive?
  - Through which administrative structures are the policy implemented, and how are roles and responsibilities distributed and changed?
  - Which instruments and measures are used for implementation and are former measures changed or adapted?
  - Are all requirements implemented in the governance framework

Application and enforcement of the policy

The sixth research question regards the respondents' perception of changes, and where they see main barriers to the implementation. This builds mainly on the interviews. Here it is also asked if respondents see any evidence of land use and landscape change as an effect of the Habitats Directive and CAP implementation.

Respondents are asked for their perception of the following questions:
- Does the legislation sufficiently cover the policy requirements, or does it need improvements?
- Is the administrative implementation structure adequate and coordination sufficient?
  - How is the implementation prioritised relative to domestic policy in these areas?

- o Are the measures selected adequate, and are they enforced?
- o Are the financial arrangements and effort adequate and sufficient for the targets to be met?
- How is the implementation process perceived, and which main barriers for implementation are met?

3.3 The Habitats Directive: design of the cross-cutting analysis

The cross-cutting analysis draws on the country reports and other relevant literature. The analysis was structured according to following themes:

1) The Habitats Directive transposition process and compliance types
   - Did the transposition follow the deadlines given? Which kind of delays where there, and did any infringement procedures take place during this process? What are the explanations given?

2) The Habitats Directiveimplementation process:
   - Which adaptations in governance structures or regulatory style took place?
   - What was the perception of the relevance, effectiveness and sufficiency of the instruments and measures selected, and which barriers for their success were found?
   - Which funding mechanisms are used and are they relevant and sufficient?
   - What is the perception of main barriers for implementation?

3) Policy integration
   - How did the agri-environmental measures support the implementation of the Habitats Directive?
   - Did the stakeholders agree to this perspective of the schemes?
   - What were main barriers for policy integration?

4) Discussion: Delayed transposition and insufficient implementation - misfit or other explanations?

The links between the research questions and the analytical design is summarised in table 2

Table 2 Links between research questions and the themes analysed in the country studies and the cross-cutting analysis

Research questions	Country studies	Cross-cutting
1. Characteristics of EU policies	Document analysis at EU level	
2. Compliance patterns as compared to earlier studies	**Transposition** - timely, correct, complete - sufficiency and complexity	Transposition processes, **compliance types,** and explanations of delay
3. Adaptations in governance structure, and distribution of roles and responsibilities	**Institutional implementation** - institutional structure before and after Habitats Directive implementation	**Adaptations to governance frameworks** - Necessary adaptations in administrative structures and type of instruments
4. Instruments and measures - which in use and adequacy - changes in approach or target groups	**Institutional implementation** - instruments and measures in nature conservation before and after Habitats Directive implementation - links between Habitats Directive and CAP pillar 2	- Perception of relevance, effectiveness and sufficiency of instruments and measures - Barriers to implementation
5. Alignment between objectives and resources (financial and other)	**Institutional implementation** -type, adequacy and sufficiency of resources	**Policy fit/misfit** - Policy integration
6. Stakeholders perception of the implementation and barriers	**Application and enforcement** - sufficiency of legislation - adequacy of implementation and coordination - implementation process and barriers - evidence of impact on land use/landscape	- Barriers to application and enforcement
7. Differences in transposition and implementation		**Discussion of implications** -policy implications - theoretical implications

4   Analysis of the Habitats Directive

4.1   Objectives

The Habitats Directive was adopted in 1992. The main aim of the Directive is to promote the maintenance of biodiversity by requiring Member States (MS) to take measures to maintain or restore natural habitats and wild species, as listed in the Annexes to the Directive, to a favourable conservation status, introducing robust protection for those habitats and species of European importance.

The objectives of the Habitats Directive as stated in the articles are as follows:

- Maintain or restore European protected habitats and species (as listed in Annexes to the directive) at a favourable conservation status as further defined in relevant articles;
- Contribute to a coherent European ecological network of protected sites by designating Special Areas of Conservation (SACs) for habitats (listed in Annex I) and for species (listed in Annex II). These measures are also to be applied to Special Protection Areas (SPAs) classifiedunder Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network;
- Ensure that conservation measures are in place to appropriately manage SACs and ensure appropriate assessment of plans and projects likely to have a significant effect on the integrity of a SAC. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensatory measures are necessary to ensure the overall coherence of the Natura 2000 network;
- Member States (MS) shall also endeavour to encourage the management of features of the landscape that support the Natura 2000 network;
- Undertake surveillance of habitats and species
- Ensure strict protection of species (listed on Annex IV)in their natural range

4.2 Instruments and procedures

The obligations in the Habitats Directive are expressed in the various articles of the directive, and the main instruments that the EU directive applies to reach the objectives are the following:

- Creation of the Natura 2000 network – designation, delimitation and domestic legal adoption of the areas
- Protection of the habitats from deterioration
- AI: Assessments of Implications (of projects which may impact on the Natura 2000 designation basis)
- Necessary conservation measures (fx management plans,statutory, administrative or contractual measures, reflecting their ecological requirements)
- Encourage management of landscape features supporting N2000 network (e.g. green corridors)
- Annex IV species list protection (in their natural range – i.e. also outside N2000)

Article 6 in the directive states the requirements to management of the Natura 2000 sites according to the Habitats Directive. Firstly, these imply an obligation to protect the designated areas against any deterioration or disturbance, and this obligation become effective already from the EC adoption of the Sites of Community Interest (SCIs) which are the areas proposed to (pSCI) and subsequently accepted by the Commission. With the acceptance, they become the SCI list to be legally transposed to SACs by the member states (MS). Furthermore, there is an obligation to establish a future-oriented nature management within the areas designated, with necessary conservation measures aiming at a favourable conservation status of the protected nature types and species, when adopted as SACs. Hence, MS need to establish necessary conservation measures as well as restoration projects – and to produce management plans, if need be. Also there is a requirement to assess projects and plans against their possible negative implications on the N2000 areas, relative to the areas' conservation objectives, and the prohibition of such project or plans, with the exception of their vital interest to society, and no existing alternatives – in which case compensatory measures shall be implemented.

The connection between the requirements expressed in the different articles and the nomenclatures for the areas designated is illustrated in figure 2.

Figure 2: The requirements to Areas of special Community interest (SCI) and to SAC
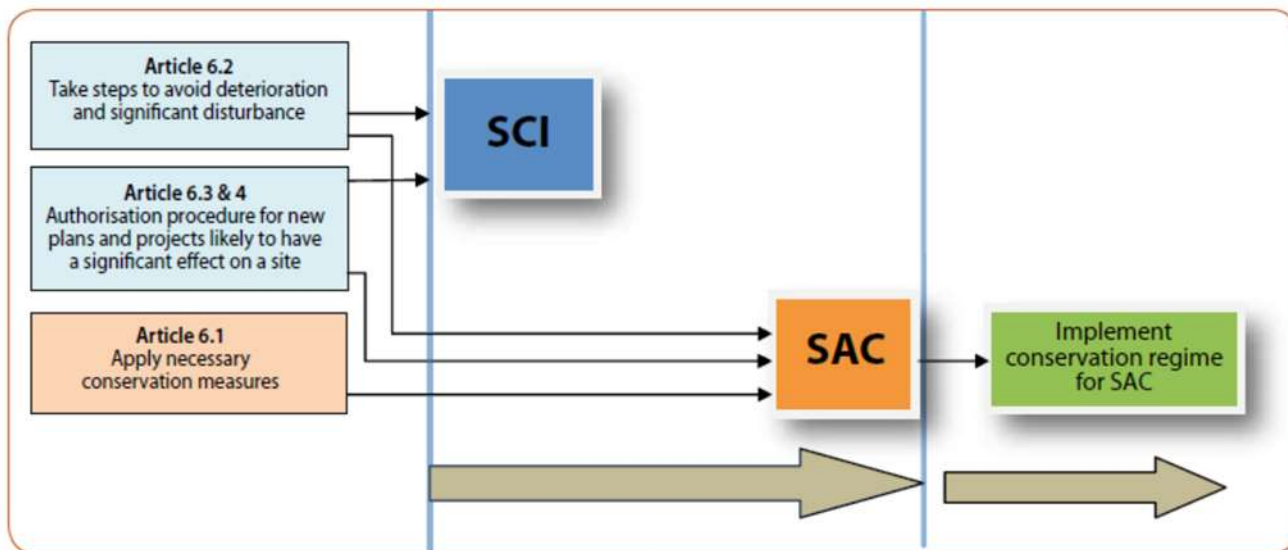
Source: Natura 2000 Newsletter, 30, June 2011.

4.3 Obligations and deadlines

The obligationsto member states and the deadlines adopted in the Directive were:

>1994: Transposition of the Directive (Laws, regulations, administrative provisions)
>
>1995: List of habitats/species and their location proposed to Commission as basis for negotiating N2000 sites (pSCIs)
>
>1998: Commission to have adopted list of sites of Community importance (SCI)
>
>2000: First reporting on progress – then every 6th year
>
>2004: Final deadline for domestic legal adoption of N2000 sites (transposition to SACs)
>
>2004 latest: When adopted on the domestic list, conservation requirements are activated (chapter 6)
>
>6 years after Commission adoption of SCI list, proactive administration must be in place through statutory, administrative or contractual measures

Due to the difficulties of transposing and implementing the HD in member states, different aspects have needed clarification through procedures in the European Court of Justice (ECJ). The most important have concerned the establishment of SACs, where is it ruled that SACs should be identified based on scientific criteria only, and that the list of SACs had to be complete and provide a homogenous and representative geographical cover, regarding the entire territory of the MS. Moreover, that 'MS may not take account of economic, social and cultural requirements or regional and local characteristics when selecting and defining the boundaries of the sites to be proposed to the Commission as eligible for identification as sites of Community importance' (European Commission 2003). Another clarification concerned the relationship between the transposition and the implementation, where it was emphasized in a ruling against Greece, that it was not sufficient to adopt a system of protection of species - it also needed to be effective (ibid).

4.4 Policy type

Using the typology of Knill and Lehmkuhl (2002), the Europeanization mechanism used in the Habitats Directive, is the institutional compliance type (prescriptive). The Habitats Directive is a regulatory type of intervention, laying down mandatory regulatory instruments for the conservation of the European nature, through area designations and requirements to protections against deterioration as well as pro-active conservation. It works through the domestic administrative structures, but leaves the lay-out of the management structure to the national discretion. The implementation mostly intervene at market mechanisms by putting restrictions to land use: preventing certain projects and activities to take place in or near protected areas. Instruments to pro-actively protect or restore habitat quality are also partly market based, but often found in other policy programs, such as compensation to land owners, who are participating to fulfil the directive, through the agri-environmental measures in the Rural Development Program under CAP. However, restoration projects that do not intervene on the markets also take place, funded by LIFE or domestically financed restoration projects. It is characterized as a policy that requires 'institutional compliance' in the member states, in order to be implemented.

While the majority of the actions prescribed are mandatory, room for national interpretations exist, for instance in the location and designation extent (however to be negotiated with the Commission), in the procedure for designation as SACs, in the way to implement the requirements in national legislation and administrative set-up, in the ways to set up pro-active conservation measures (specific management plans, contractual measures or other) and in implementing the more soft instruments such as the maintenance of the structural coherence in the landscape.

4.5 Review of the implementation of the Habitats Directive

A systematic assessment of the conservation status of Europe's most vulnerable habitat types and species protected under the Habitats Directive was carried out as part of the regular six-yearly progress reporting across 25 Member States (European Commission 2009). Overall, the report concluded that only a small proportion of the habitats and species of Community interest were in a favourable conservation status.

It showed that the continued work needed to focus on completion of the Natura 2000 network, restoration of individual sites and effective management of the network. This would again require sufficient resources.

Moreover, the share of areas of unknown status was particularly high for species found in the countries of southern Europe, with Cyprus, Greece, Spain and Portugal all indicating 'unknown' for more than 50 % of the species reported in their territories.

An EEA report investigated the importance of using the Common Agriculture Policy (CAP) to prevent the abandonment of high nature value farmland and its intensification as a key action to halt biodiversity decline (EEA, 2009a).

Appropriate management of theagricultural habitats which are important for habitats can be supported by the Natura 2000 scheme under the RDP second axis, providing financial compensation to farmers situated in Natura 2000 sites who are obliged via the site management plans to apply farming practices necessary to maintain or enhance biodiversity value. In addition, from 2008, Pillar 2 measures for the maintenance of semi‑natural grasslands have been restricted to Natura 2000 sites. These are changes from the first Rural Development Programme, where Natura 2000 was not specifically targeted.

5 Results from country reports - country summaries

The following section summarises main results from the country reports. Literature references are found in these reports and are only included in the present report when supplementing collected data.The analysis of barriers for implementation and enforcement, as well ascomplementary information on other issues build on interviews with stakeholders to the implementation process in the countries included. Table 3 show the number and type of respondents in the countries investigated

Table 3: respondents according to number, type and country

Number and type of respondents						
Informants	Acronym	DK	NL	AT	GR	RO
State level civil servant/Central authority/Agency	CA	1	3		3	3
Regional level civil servant/authority	RA	N/A	2			2
Local level officials/authority	LA	2				2
Environmental/Nature NGO	NGGO	1			1	
Agricultural organisation	NGAO	1		1		
Other NGO	ONGO	1 *)				
Scientific Expert	EX		3	2		1
Designated area management agency					1	
		*) Local Government, interest organisation for municipalities				

5.1 Denmark

Respondents:

    CA: Policy maker in the Nature Agency under the MoE

    LA1 and LA2: Civil servants in two municipalities working with n2000 action plans

    LG: Consultant at the Local Government - interest organisation for municipalities.

    NGGO: Employee of the Danish Association for Nature Conservation, working with Natura 2000

    NGAO: Employee at the Danish Agricultural Association, working with Natura 2000

5.1.1 Transposition

5.1.1.1 Designation process, timeliness and completeness of transposition

The transposition of the Habitats Directive in Denmark has mainly taken place through adjustments to existing legislation. No specific Natura2000 law has been adopted, and the area is legally covered mainly by the Law on Nature Protection (1992, several times amended), The Forest Law, The Law on Environmental Objectives (2003), the Habitats Executive Order and the Executive order on Reporting new activities in N2000 areas. Moreover, a number of other legal orders have implemented the N2000 requirements to their respective Assessment of Impacts of new plans and projects.

The initial conception in the Ministry of the Environment was that the Danish laws already implemented the Habitats Directive through the 1992 law on Nature Protection, but also through other existing laws on

Forests, Resources and Watercourses (Kjer et al 2004). This was opposed by several stakeholders to the process (experts, NGOs), and in 2002 the Forest- and Nature Agency asked the Junior Council to the Treasury (Kammeradvokaten 2002) to investigate the Danish implementation of the Habitats Directive. The conclusion was that Denmark needed to establish a more precise, legal framework for the implementation mechanisms. Meanwhile, EC was also increasingly observant on the transposition of the article 6 protection obligations, and a letter of notification was submitted to Denmark in 2003. At that time, amendments to the Law on Nature Protection and the Law on Forests were already underway, and a new Act, the Law on Environmental Objectives (2003) was adopted. The latter concerned both the Water Framework Directive and the Habitats Directive.

The requirement to assess implications of projects (article 6) was not fully transposed until 2007, and later was added a duty to notify the local authority of activities planned within N2000 sites, for evaluation of the need for more thorough assessment.

Designations under the Natura 2000 network include areas protected under the Birds Directive as well as under the Habitats Directive. In Denmark, there is a large overlap between the two designation types.

The Habitats Directive requires the use of a classification (the CORINE habitat classification) which was one of the first common classification systems across Europe. This choice posed a problem for most countries, including Denmark, where the system normally used rested on a different approach to vegetation sociology (Aaby 2003). Sufficient knowledge for the designation did not always exist.

The designation of Habitat areas (SCIs) lasted for many years. The first list was dispatched to the Commission in 1995, but included too few areas according to the Commission. Due to the delays, an infringement procedure was initiated by the Commission in 1997 against Denmark (and a number of other countries), requiring more areas related to nature types and protected species to be designated (Naturrådet 2005). Denmark responded by extending the list and implementing the designation in legislation by the executive order called the Habitats Executive Order in 1998 (Executive Order 782/1.11.1998), which also implemented the Birds Directive and the Ramsar Convention, and which is the basic legal text implementing the Habitats Directive (adoption of SCIs as SACs). The Commission, however found that still too few areas were designated to cover the extent of the nature types, and a final list of SCIs was then agreed and adopted in 2003 (Rudfeld 2003). The new list included 254 habitat areas, covering 8.4% of the Danish land territory and 10% of the marine area. Large parts of the terrestrial designations are areas owned by the state - either under the Nature Agency's jurisdiction, under the Ministry of Defense or the Danish Coastal Authority. The total is between 40 and 45 % of the designations.

The process of designation was inclusive - many stakeholder organizations were involved in the consultations, whichwere considered broad and democratic by respondents. Also more specialized organizations were heard, such as Nordic Herpetological Association or Danish Entomological Association.

Amendments have been adopted later – latest in 2011, and according to the Nature Agency, the number of N2000 areas is today 252, covering 8,3 % of the Danish land area (app 365.000 ha) and 17, 7 % of the marine area.

The general conception by respondents was that the transposition of the Habitats Directive is now complete, however with an NGO respondent pointing to a few gaps, especially in relation to marine areas.

Main institutional reasons for delays in transposition and designation were

- Mistaken perception of existing compliance
- Changes to the approach to habitat classification
- Inclusive - and thereby time consuming - designation process

5.1.1.2 *Nature management preceding the Habitats Directive and adaptations to approach*

From a century of nature conservation, policy in the 1990's changed towards protection, maintenance and restoration. This was a change in national policy, but probably also with inspiration from EU policies. The Nature Protection Act from 1992 instituted a general protection to all nature types (later to be called §3 areas from the relevant paragraph in the law), above a defined, quite small size. This protection persists and includes heathland, salt meadows, ponds, bogs, meadows, dry grassland and streams – often part of the agricultural land mosaic. These areas cover around 10% of the Danish land area, and can be quite small (e.g. ponds over 100 m2 are protected). The regulation of these areas relate to their registration (mapping), and to the prohibition of changes to the areas by owners or users (passive protection). The main principle is that activities such as fertilization or use of pesticides on the areas can take place without dispensation only if this has been former practice, while new management activities or other changes that would alter the ecological condition of the area are prohibited or need dispensation. There is no obligation to restore the areas (active protection), and they may therefore "grow in and out" of protection. The authorities can set up targets for the areas, but for private land, the measures are to be implemented in voluntary agreements with the land owner.

Changes following the implementation of the Habitats Directive in Denmark are related to

- A specific focus on the protected habitat types (§3) in N2000 areas, and less on the remaining §3 protected areas outside N2000
- A move from predominantly passive conservation of the nature types to plan for active conservation
- Introduction of a domestic legal framework for ensuring the active conservation (Law on environmental objectives, including N2000 planning framework), and assessment of implications of projects in the vicinity and within N2000 areas

5.1.2 Institutional implementation

5.1.2.1 *Management plans*

The institutional approach taken in Denmark with the 2003 Law on Environmental Objectives implements the article 6.4 on pro-active conservation by laying down a planning framework for Natura 2000 to produce and realise the Natura 2000 plans and ensuing Action plans. A common Natura 2000 planning paradigm secure a consistent and unified approach to the production of N2000 plans and can be interpreted as a consistent response to a the active conservation demand with corresponding adaptations to the legal set-up - hence following a Europeanization pathway. It build to some extent on the Danish planning culture, but allocates priority to the objectives of the environmental directives (Habitas and Water Framework) in the local level planning processes, to some extent abolishing the earlier balancing of interests through spatial planning.

The requirements to the plans are that they include a basis analysis of present state, definition of a target for favourable protection status and a program of measures. The 246 N2000 plans have been adopted and published in December 2011, with considerable delay in relation to the formerly planned schedule.

The Law of Environmental Objectives requires Action plans to be produced on top of the Natura 2000 plans. These decide on the measures to be used within the N2000 areas, and state expected effects in order to improve or maintain the nature quality. They run until 2015, to be followed by a new planning sequence for the next 6 years.

5.1.2.2 Management measures, changes from former management and funding models

N2000 areas and §3 areas are to some extent overlapping, as the §3 areas represent part of the species and nature types that are protected by the Habitats Directive, but in the N2000 areas the protection is stronger, and active conservation is also required. The main instruments are:

> • N2000 plans and action plans with ensuing nature maintenance and projects for restoration
> • Prohibition of new activities in N2000 areas – relevant activities are specified in an executive order.
> • Duty to notify on activities in N2000 areas which are not eligible for Assessment of Implications, such as cultivation of permanent grassland in Bird Protection areas, change in use of small nature areas (beneath the size limits for §3 areas), a.o. (Nature Agency homepage)
> • Assessment of implications for all new projects and plans with possible implications for the status of nature types or species in N2000 areas - this also includes regulations related to the explansion of larger animal farms in the vicinity of Natura 2000 areas
> • Subsidies for voluntary projects and maintenance agreements with land owners

The majority of activities to take place for active conservation are thus voluntary and require land owner consent and participation (Nature Agency, 2011). Subsidies for different measures to maintain areas in Natura 2000 are available from the range of measures to be obtained in the rural development program, and they are voluntary. The measures that are available for N2000 areas are:

- Maintenance of grass- and nature areas – 5 years contracts
  - Subsidy for grazing
  - Subsidy for mowing – possibly with grazing

Both schemes have different subsidy levels for areas inside and outside the Single Payment Scheme

- Establishment of natural hydrologic conditions (wetlands)
  - Subsidy for establishment of natural hydrology in N2000 sites where this has been planned for
- Extensification of grassland management – 1-year contract
  - for grassland inside and outside N2000 areas, and inside and outside Single Payment Scheme areas, subsidy can be obtained for grazing or mowing, without using fertilizer or pesticides
- Clearing of Shrub and preparation for grazing
  - Subsidy for clearing of re-growth, including and excluding preparation for grazing. If grazing is planned, subsidy can also be obtained for fencing, water etc.

The active management (i.e. changed management, or restoration) is carried out through general nature management in municipalities, larger EU-Life projects, mainly coordinated and co-financed by the Nature

Agency, and through subsidies from the rural development program, controlled by the Danish AgriFish Agency. A precondition for agreement on a project under the Nature Agency is the existence of a political vision or purpose covering the issue, and local back-up and engagement. The nature projects cover a broad spectrum of political visions, including management of Natura 2000 areas.

For the general active management, a specific Danish financial model is involved: At the state level fund are prioritized in the yearly Finance Act. When new tasks are allocated to the municipalities, a negotiation between the State and the Local Government (interest organization for the municipalities) is initiated, in order to agree on how large the new task is, and how much funding it will need. This implies that a general funding for Natura 2000 action plans and their implementation has been allocated to municipalities, as part of their yearly overall allocation. In addition to this, municipalities can apply for funding for different types of measures, e.g. for afforestation or green partnerships (citizen improvement of nature, outdoor life and dissemination). The yearly national level allocation also includes funds distributed by the Nature Agency for private afforestation, establishment of small landscape elements such as pond and wildlife plantations and wetlands. A consultancy study carried out in 2003, estimated the future costs of maintaining §3 area within N2000 areas to 150 m €. When the N2000 plans were finalized in 2011, costs associated with their implementation during the period 2012-2015 amounted to 240 m €, of which the main part was for compensations to land owners, expected to be derived from the Rural Development Program.

The measures can be summarised as follows

1) National nature protection after the Law on Nature Protection, securing that nature types are not deteriorating (§3 area protection -passive).
2) Measures, aimed at the agricultural land, which can be supported by the rural development program (environmentally friendly farming - as above) – often used on nature types needing grazing or other maintenance, such as dry and semi-wet grasslands. Bogs and dunes fall outside these measures, as they have no agricultural interest to compensate. Maintenance of these can still be supported through the rural development program's non-productivity enhancing measures.
3) Larger projects can be supported through the LIFE program.
4) The traditional nature management, where restoration projects, construction of ponds and all kinds of smaller agreements, which are too small for LIFE projects are carried out, mainly based on national funding.

The main change in measures following the implementation of the N2000 is related to the move from passive to active management of the areas. Measures have not changed radically, but changes are more related to a geographical targeting of the measures, which according to the CA implies that during the last 10 years, almost all LIFE funds have been directed to the N2000 areas, and moreover the agri-environmental schemes have also increasingly been targeted.

Projects (motorways, industrial plants, etc) have been re-located (rather than abolished) following impact assessments. It is difficult to assess the extent of this effect, as the re-location usually happens already at the planning stage.

5.1.2.3 Administrative structure, roles and responsibilities

The Natura 2000 areas relate both to the Habitats Directive, the Birds Directive and the Ramsar Convention. The responsibility for the designations rests with the Minter of the Environment, and is delegated to the Nature Agency under the Ministry of the Environment, who is also responsible for

producing management plans, for monitoring and reporting to the EC, while the municipalities are administrative and implementing authority of the legal requirements related to the nature. A structural reform in 2007 abolished the counties who were former responsible for nature conservation planning and monitoring. Some delay in the process can probably be explained by the process of overall reorganisation of tasks.

This reform resulted in a centralised model for implementation keeping main responsibility at the central level in the Nature Agency, being responsible for the Natura 2000 plans. To ensure the enforcement, the framework obliged the municipalities (and ministries in cases of publicly owned land) to produce actions plans for how Natura 2000 plans were realised. This was followed by a financial agreement between the government and the Local Government (interest organisation for municipalities) for allocation of resources. Hence, municipalities are responsible for the implementation of these plans by carrying out concrete activities such as expansion, maintenance, protection and restoration of the protected areas, within their jurisdiction. As measures for active protection are mainly voluntary, it requires a dedicated effort to reach land managers, and to discuss and negotiate possible interventions and how land managers can be involved in these. Management plans for state owned areas may be made by municipalities or by the public land owners, or in collaboration. Active management (i.e. changed management, or restoration) is also carried out through larger projects carried out by municipalities and through larger EU-Life projects. These activities are coordinated by the Nature Agency, but a precondition for the acceptance of a project is the existence of a vision or purpose for the proposal, and local back-up and engagement. The nature projects cover a broad spectrum of political visions, including the implementation of the Natura 2000 plans.

The duty to produce impact assessments of projects, which may have an effect of the N2000 sites are implemented in the respective sector laws, and are managed according to the general delegation of responsibilities, (i.e. where permits are normally executed). The implementation of the Habitats Directive did not change this role.

A hearing phase follows the publication of draft N2000 plans, as well as the later municipal action plans. Everybody is allowed to make comments to the plans. The implementation of the Habitats Directive have in general gained much attention from economic actors and their interest organizations such as the farmers and the Food and Agriculture organization, The Hunters organization etc., as well as from the green NGOs, notably the Danish Association for Nature Protection and the Danish Ornithological Association. This was true already in the designation phase, where stakeholder involvement was broad and the process experienced as inclusive, butalso in the period from 2003 onward, where the process was delayed. The long term engagement of NGOs and other stakeholders exerted a strong pressure for raising the issue on the policy agenda, and eventually succeeded with the finalisation and adoption of the management plans in 2011. The planning activities, as well as the active protection related to N2000 areas are new requirements, and the delegation of roles follow the division of responsibilities laid down after the structural reform in 2007, where counties were abolished. As nature conservation mainly lies with the municipalities, they are responsible for the development of action plans, which are mandatory to follow up on the N2000 plans, according to the Law on Environmental Objectives.

In 2000 as well as in 2012 expert advisory commissions to the government have been formed. The first was solely for advising on how to strengthen nature and biodiversity conservation - the second had the triple purpose to advise on the structural, economic and environmental problems in agriculture. Apart from these advisory bodies, there are no formal bodies for following and advising the implementation of the Directive.

However, research and advisory services are frequently required on specific tasks, and projects are initiated from the ministry.

For the local implementation, N2000 areas sometimes cross the boundaries of municipalities and it may be necessary to coordinate planning and implementation of projects. It is up to the municipalities to decide on this. They have solved these situations by deciding that for the planning phase, one municipality takes the lead, and coordinates with the other involved. When the management phase starts, municipalities take individual responsibility. This also includes situations, where publicly owned areas (e.g. by Nature Agency or the Ministry of Defense) are part of a Natura 2000 area.

5.1.3 Perception of barriers to transposition and enforcement

5.1.3.1 Transposition barriers
In Denmark, the transposition process was much delayed, and the barriers were technical, administrative and political.

Technical issues related to e.g. changes in classification systems, and lack of proper definitions (e.g in relation of marine areas (NGGO)), but one important explanation, mentioned above, was that the Ministry of the Environment perceived that the obligations in the Habitats Directive were already implemented in the Law on Nature Conservation, when complemented with an executive order on the demarcation and administration of international nature reserves. During the 00's, politicaland legal processes taking place in the nexus: the European Court of Justice - the Danish NGOs with expert backup - the Danish administrative bureaucracy took place. These processes, which concerned mainly different perceptions of the completeness and correctness of the transposition of the full range of obligations, illustrate the new situation in which actors take on new roles, due to the procedural and judicial approach taken in the Habitats Directive that imply that stakeholders can hold the national government responsible for the full transposition of the articles in the directive.

Another substantial issue was the changes to the management approach that existed in the Danish nature management before the EU directives acquired a prominent role in the Danish nature and environmental policy. Formerly, management approaches largely focused on regulating the source in relation to the effect area (impact assessment) – e.g. where would the effects of a change in livestock density take place - while the Habitats Directive and later the Water Framework Directive focus on the quality of the resources that is aimed for, and working back from this, how this environmental quality can be obtained. This adds an active planning dimension to nature management, which was not present in the legal framework before the Habitats Directive(and the Water Framework Directive) transposition.

The political context was that of a period where low priority had been given to the nature policy during decades, and where policy on the aquatic quality held priority in the Danish environmental and land use policy. When the Habitats Directive was initially transposed it was not in a context of non-compliance, but both at that time and during the following years a minimum compliance approach characterized the Danish policy towards the environmental EU directives.

5.1.3.2 Planning framework and vertical/horisontal coordination
The respondents predominantlypointed to barriers in the implementation process following the designation of the Natura 2000 areas. Municipal level managers found that the planning framework - as it was implemented in the first phase - was not adequate (LRA). They found that the state level produced the

Natura 2000 plans with too much detail - not only stating targets for the individual sites, but also the effort, e.g. how large areas should be involved in improvement. This made the room-for-manoeuvre for municipal action plans too small, and producing the action plans became almost repetitions of the Natura 2000 plans.The action plans, on the other hand, was not allowed to be detailed enough to address specific areas (and thereby land owners). This issue was also raised by the Agricultural Association, as it did not allow land owners to be informed by the maps if their areas would be affected.

Also, the municipalities thought that they were much too little involved in the production of the Natura 2000 plans, leading to lack of proper - an even erratic - data basis, and lack of local knowledge.

Hence, the vertical coordination was perceived by LRAs as almost non-existent.

As mentioned above, horizontal coordination was needed when N2000 areas crossed municipal boundaries, which is often the case. The otherwise well-coordinated planning by municipalities sometimes resulted in problems for stakeholders in the hearing phase, as the coordinated Action plan is returned to each municipality to take care of their respective areas, giving rise to e.g. different timing of the hearing phase for different areas in the same plan.

5.1.3.3   Instruments and funding

The land managers are required to notify the municipality about management changes in Natura 2000 areas, for which Assessment of Implications are not immediately required. The municipality will then make a screening and decide if impact assessment is necessary. This measure has been raised as an area with larger challenges, due to the management model and the financial model, which implies that the incentives for identifying protected species are not high - neither from the farmer nor from the municipality, due to lack of resources in municipalities for compensation to farmers, and lack of guarantee for farmers of what will happen after the first 5 year contract.

The main problems perceived are that the most important instruments - the agri-environmental schemes - are not designed with the main purpose of nature conservation and improvement, but as farmer support. This implies that it is managed from the Ministry of Food, Agriculture and Fisheries rather than the Ministry of Environment. Also, these schemes are voluntary, and while this is seen basically as a strength from all respondents, it creates a lot of challenges related to the attractiveness (size of subsidy), the resources for facilitating the entrance to the schemes (the municipal-farmer dialogue), and the flexibility of the schemes (what can be supported). One major issue is the relationship between these subsidies and the single payment scheme, as for areas, where both payments can be obtained, the farmer may lose - part of - the single payment, even with small violations to the agri-environmental management agreement. According to the local administrators the control is very rigidly enforced.

LIFE projects are often too large and complex for being an adequate means for local administrators to use (LRA).

5.1.3.4   Policy integration

Respondents think that the coordination between the Ministry of the Environment and the Ministry of Food, Agriculture and Fishery during the Natura 2000 planning period has been rather bad, and the interest organisations state that during the process they often felt that they were facilitating the dialogue between the ministries.

Also, it is mentioned that there are large difficulties in bringing the nature- and water plans together. Due to a complicated and conflict-laden process of producing the WFD water plans the two planning processes moved apart in time. In addition, the Habitats Directive has no deadline for obtaining favourable conservation status in the N2000 areas, which is the case for the water plans. This makes the water plans stronger and more demanding for the MS.

5.1.4 Land use or landscape impact

In the period 1989-2008, 20.000 ha land was bought by the Nature Agency for nature protection purposes. A little more than 10.000 ha were used for nature restoration, while 4.100 ha were used for afforestation. Remaining areas were for recreational purposes or cultural landscape. This can be related to the Nature Agency's total area, which is 197.000 ha, divided into 108.000 ha forest, 77.000 other habitat areas and 13.000 ha bare land. It is not possible to estimate how much of this transformation was solely due to the requirements in the Habitats Directive, but 10% of the publicly owned protected nature areas excluding forest have been acquired after the adoption of the Habitats Directive.

None of the respondents thought that impacts on the landscape as an effect of the Habitats Directive could be identified at a larger scale yet, while some minor (in terms of area)effects was mentioned: e.g. almost all LIFE projects during the last 10 years has concentrated around the Natura 2000 areas, and areas with more extensive management are created. Another effect is that N2000 areas - and presence of protected species, has blocked for some localisations of projects.

This lack of impact is explained by the active conservation effort, which only starts up now after the adoption of the action plans.

A specific study (Levin et al, in prep) of extensification processes taking place inside and outside the N2000 areas during the period 2000-2010 showed that increases in the proportion of extensively cultivated agricultural areas and set-aside was higher in N2000 areas than outside, taking into account soil types and slopes. This is a result of the schemes increasingly targeting subsides for these measures to N2000 areas, but concerns a small area in total.

5.2   The Netherlands

Respondents:

> CA:Policy officer working on policy development projects at the Natura 2000 department of the National Government, Ministry of ELI.
> DFS: N2000 manager at the Dutch Forest Service
> RA: Civil servant in the Province of Gelderland
> EX: researcher with expertise on nature conservation policies

5.2.1   Transposition

5.2.1.1   *Designation process, timeliness and completeness*

During a longer period the Dutch Government considered that the Birds and Habitats Directives would not require significant changes to Dutch nature conservation policies. In particular, it preferred its own system of nature conservation, called the Ecological Main Structure (EHS, see more below), and significant delays in transposition resulted (Arnoults and Arts, 2009). Little attention was paid to the directives and the Netherlands did not comply with the deadline for proposing SCIs (1995), while it had also received several warnings in relation to the earlier adopted Birds Directive. In 1996 only 27 sites were designated.

In 1998, too few areas were yet presented to the Commission, and the Directives were not formally transposed in the Dutch legislation. As a consequence, the European Commission decided to engage an infringement procedure with the European Court of Justice. The following conviction, the increasing media attention on lawsuits regarding nature conservation, and the complaints of NGO (EI) finally made the government considering more seriously the directives.Hence, in 2003 the Dutch government was the first to submit a list of 141 habitats. This was important to the Commission, as it could push the issue to other member states.

The main laws for nature conservation in the Netherlands are the 1998 Nature Conservation Act (Natuurbeschermingswet, NB-wet) and the Flora and Fauna Act (2002). Both can be regarded as the Netherlands' interpretation of the European Birds and Habitats Directives. The 1998 Nature Conservation Act lays down requirements for the preservation of nature areas. The European Commission did not consider the 1998 law to be sufficient[1] (official letter) and the new Nature Conservation Act needed to be revised. The revised Dutch Nature Conservation Act came into force in 2005. The Flora and Fauna Act of 2002 is a cluster of several already existing animal protection laws and protects many plant and animal species including those of the Birds and Habitats Directive. The Birds Directive and the Habitats Directive were translated almost literally in these two acts, and is now considered transposed in its entirety by all respondents.

Following the conviction by the European Court of Justice, ECJ, in 1997, The Ministry LNV informed the European Commission that 162 Natura 2000 sites would be designated under Dutch law, with a total area of more than 1 million hectares (of which two third is open and coastal water, leaving 367.000 ha for terrestrial sites). With the announced list of 162 sites, the Natura 2000 designation was deemed sufficient to implement the objectives of the Habitats Directive. However, the National Government took delay in the official designation under Dutch law, as there were still concerns about the consequences for the economic

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[1] Letter of the European Commission of 24 oktober 2000, nr. SG(2000)D/107 813

activities. In 2000, the Commission asked for further adaptations to the list, and in 2003 a list of 141 sites (SCIs) was approved by the Commission.

The designation strategy was to select sites within the Ecological Main Structure, where nature reserves already existed,although the alignment of areas sometimes differed. Habitats and species should be identified within these boundaries. This was very inflexible (CA respondent) and did not include new areas and user groups (CA and NGGO). No areas without nature protection function were designated, but according to other respondents more designations could have been made. For the SBB, it means that no efforts were made to sensitise a broader public and make them aware of the benefits or consequences of such a network. Only professional organisations were heard during this phase, and consultations were held at both national and regional level, targeting bodies responsible for the management, but without an extensive site-based consultation process. Land owners were not involved until the official domestic adoption process - i.e. after the proposal of the sites to the Commission.

Concerns were expressed by respondents regarding the fact that Natura 2000 sites are isolated from each other, claiming that further designation could have improved this lack of connection. For one respondent (EI), the whole designation process was led by procedural aspects rather than by nature conservation objectives.

In 2012 only 58 sites are officially designated (as SACs). According to the EC Barometer (EC 2012), 13.82% of the terrestrial land area is covered by N2000 sites.

Massive problems have followed the transposition and implementation (see further below), and currently the legislation is under revision as a proposed "Nature Act" will replace the former Flora and Fauna Act, the Forestry Act and the Nature Conservation Act. The consultation process has been finalised, but currently the status of this law is not clear, partly due to a change of government.

5.2.1.2   *Nature management preceding the Habitats Directive and adaptations to approach*

Biodiversity and nature conservation has been a priority policy during many years in the Netherlands. The first and largest NGO (Natuurmonumenten) was founded already in 1900 and they acquired areas for conservation with contribution from members. To date they are among the largest private land owners in the Netherlands. During the 20th century the nature conservation paradigm moved from a focus on animal and bird protection through conservation organizations, to purchase of land for landscape protection and spatial planning processes, followed by government led designations of national parks for natural and cultural protection (Ferranti et al 2010). Implementation was sometimes compromised by farmer objections to protection activities in neighbouring reserves. A new approach, called the Ecological Main Structure (EHS), was launched by conservationists and adopted by the government in 1990, by enlargement of smaller natural areas and creation of linkages between them. The concept envisions larger nature areas that are connected in a coherent network spanning the entire country. The Government's target is to realise all 728,500 hectares of the network by 2018, and this is about 20% of the total land area of the Netherlands. The core areas are connected through corridors. The management interventions were depending on classification (near natural, steered natural, half natural, and multifunctional), whereby (near) natural areas would allow free processes to take place (quite contrary to Natura 2000).

This EHS became the leading nature protection system in the NL, even if adaptations had to be made due to farmer and local objections (Ferranti et al 2010). Also, an integrated approach to nature conservation in which agricultural, recreational and economic values could be taken into account was deeply embedded in

the Dutch nature policy approach (Van Kleef, 2004; Arnouts and Arts, 2009). Following the - reluctant - implementation of the Habitats Directive, these aspects were both changed. The Habitats Directive imposed a nature management paradigm with prevalence of scientific criteria over societal (Ferranti et al 2010), and it does not address how to balance human and nature activities and mechanisms of spatial planning and deliberation (Beunen et al, 2013). From 2006, the government made a difference between what is compulsory to protect (Natura 2000 because of EC) and what is not absolutely necessary, which resulted into budget cuts for the parts of the EHS which is not N2000.

5.2.2 Institutional implementation

5.2.2.1 Management plans

Within three years after the official designation of a Natura 2000 site under Dutch law, a management plan has to be prepared. The plan follows a general format, or guideline for all areas. It should include current situation and trends, objectives, relation to activities, conservation measures, evaluation and monitoring, and financing. The management plans are developed by provinces or national government, in consultation with landowners, parties concerned and relevant governmental bodies. The lead is with the organisation that has the biggest share in the area. Finally, the management plan must be approved by Ministry of Economic Affairs, Agriculture and Innovation. In some cases, where the Provinces take the lead, they have to approve the management plan.

The final version of the Natura 2000 targets document was published in 2006. It has been written by the Ministry LNV. This document is an important step for the definition of conservation status both at national and site level, the relative importance in Europe and the main objectives for the habitats and species under Netherlands responsibility. This document has been considered really helpful by authorities in charge of designation of the sites (CA) and for producing the management plan (RA).

As mentioned above, 58 N2000 sites have been approved, and but only 3 management plans are finalised to date (October 2012). For all areas the bottlenecks have been reported. They are mainly related to the Nitrate guideline (70%), Socio-economic aspects (55%), alignment with stakeholders (75%), financial aspects (69%).

5.2.2.2 Management measures, changes from former management and financial models

To achieve the requirements of the Habitats Directive, two types of document are of importance in the Netherlands: the Natura 2000 target document and the management plans. The Natura 2000 document defining targets at the national level lays down the guidelines and at the same time let room to choose the measures in adaptation to the local context.Measures to be taken towards N2000 management are multiple (EI, RA). They can be divided into what is not allowed (passive protection) and what has to be done (active management). The latter can be such as extensification, purchase of areas, and creation of buffer zones (CA).

As mentioned, only 58 N2000 areas have been finally approved as SACs by 2012 (14th progress report Min. ELI 2012) for 3 areas the management has been adopted, for 89 there is a concept or draft management plan.

75% of the Dutch Natura 2000 sites is the property of nature conservation organizations and other land owners. This specific situation implies that measures to be taken inside the Natura 2000 areas are mostly implemented by the nature conservation organization as a public provision of services.

Agriculture is still present in Natura 2000 sites to a smaller degree. Some 90,000 ha (30 % of the N2000 area) are in use by agriculture (Van Veen and Bouwma, 2007), mainly in Birds Directives' areas. In the Netherlands, the most problematic part of conservation of Natura 2000 sites is the general level of intensity of the agriculture, causing eutrophication and desiccation.

For the period 2007-2013, there are several measures in the Rural Development Program for farmers located within or in the proximity of Natura2000 sites to combat these environmental problems:

> • Regulatory approach: farmers within the 250 m buffer zone are prohibited to enlarge their farm without taking care of emissions.
> • Recently a new program to combat eutrophication by nitrogen (PAS) has been released; this program aims at limiting the nitrogen emissions close to Natura 2000 site by a regulatory approach.
> • Through the Rural Development Program, funds are available to serve Natura 2000 objectives:
>> ➢ Measure 125 - Infrastructure to develop or adapt agriculture and forestry. To relocate animal farms in or close to Natura 2000 sites or theEHS.
>> ➢ Measure 214 - Agri-environmental measures. Nature conservation measures on agricultural land by farmers (budget of €412m). These subsidies are allocated within the NEN for about 66% (Ministry of LNV, 2008c). On about 3% of Natura-2000 land, nature conservation measures (under the Dutch agri-environmental measures scheme 'SAN') are taken (Van Veen and Bouwma, 2007).
>> ➢ Measure 216 - Non-productive investments. This includes a subsidy on investments, aimed at reducing the desiccation problem and at improving water quality in Natura-2000 sites and the NEN ('TOP-lijst'). The share of Natura-2000 areas in tackling the desiccation problem is about 65% (Ministry of LNV, 2007b).
>> ➢ Measure 323 - Protection and development of natural heritage: Preparation of management plans, strategies and schemes for Natura-2000 sites is one of the seven actions within this measure of the EAFRD.

On top of this is LIFE+ funds and ERDF funds for promotion of biodiversity and nature protection.

The total amount of funding for Natura 2000 from the European Agricultural Fund for Regional Development (EAFRD) has been estimated to about 173 million € of which EU funding would compose about 85% (2009). The LIFE+ funds from EU is estimated to about 18 million € and from ERDF about 9 million € for nature and biodiversity in general.

For each local or regional spatial action of people, enterprises, governments etc., it is required to evaluate the effect on biodiversity. Otherwise no permission will be given. Depending on the outcome of the evaluation the spatial plan will be approved (in case there are no effects), or has to be adapted (in case there are effects), describing the way the impact on biodiversity can be mitigated.

Responsibility for the monitoring and reporting of the conservation status of the Natura 2000 sites is still under discussion. Both the National Government and the Provinces would have a responsibility. The Natura 2000 directorate of the Ministry of Economic Affairs, Agriculture and Innovation is in charge of assessing the impacts of projects or plans.

5.2.2.3 Administrative structure, roles and responsibilities
The formulation of management plans is ensured by different bodies. The former ministry of Agriculture, Nature and Food Quality (ANF), and since 2011 the Ministry of Economic Affairs, Agriculture and Innovation

ELI, is responsible for the designation of N2000 areas. ELI is also responsible for producing the management plans of 41 of the 162 Natura 200 sites. The Ministry of Transport, Public Works and Water Management (TPW) is responsible for 19 management plans and the Ministry of Defense is responsible for 1 management plan (military area). Provinces are responsible for 101 management plans, it concerns areas owned by nature organizations. The Ministry of Housing, Spatial planning and the Environment (HSE), is responsible for the environmental quality of Natura 2000.

The National service for the countryside (DLG) is in charge of the development of the management plans, while the regional authorities arrange the public inquiry procedure. The process of establishing the management plans for Natura2000 sites is quite elaborated. A formal dialogue is organized by means of public inquiry procedures, all stakeholders, including institutional ones, can participate. A first round of consultation is organized with the representatives of the stakeholders. In a second round, everybody can give his opinion.

Since 2011 more responsibility has been delegated to the Provinces, and management plans has to be signed by both ELI and the Provinces. Provinces are basically responsible for the execution of measures and achievement of targets. The actual implementation can be carried out by NGOs, financed by the Provinces. Until 2011 a coordination platform (Regiegroep N2000) was operating with the National Government and the Provinces involved, with monthly meetings and discussions on designations and management plans. The EX respondent thinks that there is a lack of support and guidelines from the Ministry of ANF, while the CA respondent points to discussions going on between Provinces and the National Government about responsibilities and funds. A better agenda is missing, and he point to species protection. Improvements in policy integration have happened in relation to protection against nitrogen emissions, but it has taken 7 years to find the political will.

No institutionalized coordination exists to other environmental policies; it happens on a personal basis, except that Water Boards are sometimes stakeholder group to N2000 management plan. Coordination, especially to the Water Framework Directive is thought to be important by respondents, but almost non-existing and only on ad-hoc basis.

5.2.3   Perception of barriers to transposition and enforcement

5.2.3.1   Transposition - political constraints and changes from former governance framework
The conservation system introduced by the Habitats Directive differed from the Dutch,and was at first neglected, due to the perception that the domestic policy was already sufficient. A first barrier to the effectiveness of the implementation of the Habitats Directive in The Netherlands was the difficulty of the Dutch Government to deal with the changes introduced to the nature conservation system.The prevalence of ecological criteria over societal ones was another new principle for The Netherlands. In fact, before the Habitats Directive, it was preferred to adopt a more integral approach for nature conservation in which agricultural, recreational and economic values could be taken into account (Van Kleef 2004). Finally, the system developed for Natura 2000 clearly changed from the existing nature conservation system regulated through the Ecological Main Structure (EHS).Following the transposition one respondent thinks that "The National Landscapes don't exist anymore. Biodiversity is the main objective. The landscape is included as 'hedgerows', i.e. as carriers of biodiversity".According to the DSF the general lack of political will is demonstrated as the official designation is not finished yet. The Parliament stopped it and the Ministry does not encourage it.

When forced to transpose the Habitats Directive, the Dutch Nature Conservation Act was amended to align with the Habitats Directive (Habitats Directive). The Flora and Fauna Act is a cluster of several already existing animal protection laws and protects many plant and animal species including those of the Birds and Habitats Directive. According to the respondents, as long as the Dutch government enforces legislation, it is sufficient.

The public overall attitude towards Natura 2000 is not really supportive and it can be partly explained by the lack of stakeholder involvement. As limited information was provided, concerns about land restrictions arose and led to a great deal of discussion on the consequences for agricultural and recreational activities in and around Natura 2000 sites. Also, no areas without nature protection function have been designated. The strategy adopted during the first phase of the directives implementation was to designate Natura 2000 sites within areas already protected. It had as main consequence that people involved in nature conservation issue were the same as before (NGOs, National Forest Service). No efforts were made to sensitise a broader public and make them aware of the benefits of such a network.

All respondents agreed to the fact that to be more adequate, the national transposition should have been accompanied with more explanations and communication. It would have led to fewer conflicts, helped to prevent a negative attitude towards nature conservation and EU. The lack of political will implied that when the transposition finally took place it was so fast that the process was not appropriate in terms of communication.

A revision of the Nature Conservation Act and the Flora and Fauna Act is now foreseen. The legislation is viewed as too complex and too restrictive. However, for the CA respondent, rules are more or less the same as before the Habitats Directive implementation - the change is that it is not possible anymore to ignore it.

By the Habitats Directive subsuming the national legislation, the EU became a new actor of the Dutch policy able to put some pressure on Member States with legal actions. NGOs also gained importance as they can use lawsuits to stop projects in Natura 2000 areas or in areas in which HD species were present. Before Natura 2000, there was more discussion and negotiation about nature conservation. With N2000 it became more popular to take the government to court. Arguably this comes also from a societal trend to use justice more than negotiation.

5.2.3.2 *Organizational structure, roles and responsibilities - lack of communication and stakeholder involvement*

Natura 2000 sites and objectives were decided upon by the National Government. The Ministry of Economic Affairs is responsible for the results i.e. the fact that objectives should be reached. Since 2011, more responsibilities were given to Provinces, and for the National Government, this was also a way to shift the responsibilities for the conflict to another party. The Provinces have to take the necessary measures to achieve the objectives, they are responsible that measures are taken but they are not responsible in the end for the results. The Provinces can make agreements with NGOs other landowners and provide subsidies to them to implement the necessary measures. This organization of tasks seems to be adequate for Provinces and National Government, but one respondent felt that the distribution of tasks and responsibilities were "constantly changing".

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restrictions arose and led to a great deal of discussion on the consequences for agricultural and recreational activities in and around Natura 2000 sites. Prior to the site designation process around 2000 several projects were delayed (due to the art 6.3 on plans and projects) – this resulted in an increased interest of several organisations not yet very active in nature conservation (local communities (VNG) and small and medium enterprises (MKB) and recreational interest groups (RECRON). They actively became involved in the discussion on the designation process and strengthened the discourse of the HD hampering economic development (Beunen et al. 2011).

Also, no areas without nature protection function have been designated. The strategy adopted during the first phase of the directives implementation was to designate Natura 2000 sites within areas already protected. It had as main consequence that people involved in nature conservation issue were the same as before (NGOs, National Forest Service). No efforts were made to sensitise a broader public and make them aware of the benefits of such a network.

The coordination between different actors seems to be weakened by the political resistance and the emphasis on legal aspects instead of nature conservation objectives. Also the vertical coordination could be improved. A coordination platform (Regiegroep N2000) has been formed by representatives from the National Government and Provinces with monthly meetings to coordinate N2000 designations and management plans. But according the CA respondent, if progress is made to address problems more effectively, the coordination could be more intensive. For the EX respondent, more support and guidelines from the Ministry ELI to the Provinces would guide them to lead the management planning process. Another coordination group exist on the preparation of management plans, this may to some extent ameliorate the concern voiced by the EX respondent that there is a lack of guidelines on how to realise the management plans and that government support isin general insufficient. An obstacle to this work is according to the CA respondent that the question of responsibilities and funds is unresolved and discussions on this on-going. The DSF respondent claims that nobody except the NGOs and the Dutch Forest Service feels responsible for achieving the aims of the Habitats Directive, and that lack of funds is the main issue.

5.2.3.3 *Adequacy of measures and funding structure*
The DFS respondent thinks that the government attitude towards the implementation is to realise a minimum solution.The Netherlands have a long history of conflict between nature and agriculture, and this may also have inflicted on the designations. But also the general public tend to think that the nature protection is overdone, and there has been a massive resistance towards the N2000 network.

Respondents do not agree on the sufficiency of the designations. The CA thinks that areas are sufficient for the aims of the Habitats Directive, while other respondents point to the fact that no areas, which were not already protected beforehand, had been selected as SCIs, due to concerns for economic activities. E.g. the lack of inclusion of agricultural landscapes implied that too few farmland species were included. The designation of formerly protected land also implied that it was the same people who became involved in the protection of the N2000 sites, in this way furthering the lack of broader communication and involvement, which has been one of the main obstacles for implementation, mentioned many times by respondents.The EX respondent emphasises the overall focus on the procedural aspects during the designation process rather than on the substance.

The conflict between agriculture and nature conservation is emphasized by the measures taken for Natura2000 regulating the deposition of nitrogen from agriculture, and the water table, - both important issues for the status of the N2000 areas. These conflicts are presently the main reasons for management plans not being adopted and realised. Only after approval of the PAS (a separate political process) the paragraph on deposition can be completed in the management plans and they will be finalised.

The Dutch legislation ensures the protection of Natura 2000 areas from activities located outside them. When a site is affected by an activity or a construction project, compensation must be paid. However, rules are not really clear and it appears that if compensation is needed, it is often subject to debate and a big delay can occur.

The same observation is made for the habitats and species protected by the Habitats Directive but located outside Natura 2000 areas. They are formally protected through the Nature Conservation Act and the Flora and Fauna Act but in reality, local authorities as well as municipalities are not well aware of the legislation, the species concerned and how to deal with it. However, for the CA respondent, the different nature conservation programs (Natura 2000, National Ecological Network, agri-environment schemes) are perceived as sufficient, if enforced.

Several high profile legal cases on the Birds and Habitats Directives might also attribute to the general feeling that Natura 2000 could have far reaching consequences for activities and interests of stakeholders. Research showed that few plans were cancelled, the majority was only delayed as a result of court cases but it did not take away stakeholders concerns. The combination of lack of broader communication and involvement and the focus on juridical circumstances rather than the overall aims of nature protection has led to an adversarial climate where fear for penalties or restrictions in land use or building is a major barrier for stakeholders to take part in the implementation.

The climate of opposition may have made the farmers cooperation for voluntary contracts more difficult. Financial compensation was also seen too low to cover income loss and persuade private landowners to join the schemes.

There is, in general, a lack of funding for the implementation, according to all respondents.This concerns not only the management but also the funding available for restoration measures as well as taking measures around the sites to improve the abiotic conditions (reduce nitrogen deposition and desiccation). Financial resources for nature conservation derive from the general budget of the State and of the Provinces, as well as from the co-financing via CAP. Smaller amounts are received through the LIFE program. Since 2006 the funding has been guided towards N2000 areas at the expense of the Ecological Main Structure, according to the DFS respondent, but from 2010 budget cuts were implemented and there is no money from the National Government for implementation.

According to the EX respondent a whole range of nature management measures exists. He points to improved flexibility in funding and integration of funding sources as ways for improvement, and the RA mentions a potential agreement with the Water Boards, which may provide for more funding.

In 2011, the Dutch environmental agency (PBL) published an evaluation of the Natura 2000 policy. In terms of administrative performance the implementation of Natura 2000 is behind schedule. Only 2 out of 166 sites do have an approved management plan. In two thirds of the areas there are difficulties with the development of the management plan. Key issues are: the uncertainty on use and development within and

around Natura2000 sites (including existing use), the nitrogen and drought records, uncertainty about the application of the Nature, and uncertainty about the financing of measures.

5.2.3.4 *Policy coordination between Habitats Directive objectives and other environmental objectives*

The picture of the coordination between Habitats Directive objectives and environmental objectives is not entirely clear. The DSF respondent's concern is that the current government leaves too much room for economic growth at the expense of the Habitats Directive priorities, and that this is exemplified in the management plans designed by the Ministry of Transport, where enlargement of roads have a high priority. Coordination initiatives differs among the Provinces; in some cases a close coordination with Water Boards exist, in other cases work is carried out side by side, without any coordination. Particularly in the case of the Water Framework Directive and Habitats Directive objectives, the coordination could be better.An administrative mismatch exists, as nature conservation and environmental protection fall under different ministries but reside in one DG Environment at European level. At national level it is a problem that these issues belong to different ministries with different budgets and competences. The CA respondent would like to see the EU providing guidance to overcome problems between departments and permit a better integration of water, air and spatial issues.

The coordination between the Habitats Directive and the Water Framework Directive (Water Framework Directive) implementation has been almost invisible, but is improving according to respondents. There is a lack of timing in the implementation actions according to the CA respondent. Sometimes N2000 requirements are not introduced in the Water Framework Directive planning, due to the missing N2000 management plans. The EX respondent argues that the Water Boards are used to work with integrated approaches, this is not the case for the Provinces where different policy areas are treated in different departments. The CA respondent also acknowledges this kind of tension (on competences, budgets and political colour) at the ministerial level, as well as among the EU DGs.

The CA respondent claims that the budget for N2000 would not be at the present level, was it not for the Air and water quality targets, this indicating a relationship between the measures taken for these objectives and the nature objectives. On the other hand he states that part of the budget for nature is used for greening agriculture.

5.2.4 Evidence of land use impact

The respondents only find smaller effects on the land use and landscape, which could be claimed to be derived from the implementation of the Habitats Directive. Changes such as extensification of agriculture, woodland conversion to grassland, agricultural land conversion to wetlands were all occurring before the Habitats Directive as the major part of the Natura 2000 areas were already protected, and as areas had been bought for the Ecological Main Structure, and converted into various nature types.

5.3   Austria

Respondents:

> EX: two scientific experts

> NGAO: one agricultural organisation

5.3.1   Transposition

5.3.1.1   Designation process, timeliness and completeness

With Austria´s accession to the EU in the year 1995, the Habitats Directive became effective immediately without any transition period.To a limited extent, the Federal Ministry for Agriculture, Forestry, Environment and Water Management coordinates activities, especially with regard to contacts with the EU, but nature conservation is the exclusive responsibility of each of the nine federal provinces. Hence, nine partly very different ways of transposition into national laws (nature conservation, hunting and fishing) took place by adapting the existing legal framework, which included e.g. for Salzburg a Nature Conservation Law, a Game Law, a Fishery Law and a Regional Planning Act.

In 1996 an infringement procedure was initiated onthe incompleteness of the list of nominated sites of Community interest. Austria answered a second supplementary reasoned opinion of the Commission from March 2007, by referring the duty of proof to the Commission (Austrian Court of Audit et al 2008).

 By May 2007 the EC came to the conclusion that the Habitats Directive was insufficiently implemented (to different extends in Provinces) in Austria which resulted in an infringement procedure with a conviction of Austria. The long delays can partly be explained by the strong position of agriculture relative to nature conservation. By 2008 Austria is considered to have achieved an almost complete transposition of the Habitats Directive into the nine federal laws. The largest change to preceding legal frameworks is that since 2010 nature conservation is legally implemented in the land use regulation of the federal provinces. This is a major step, as it finally brings nature conservation out of the 'grey zone'.

The nine regional administration bodies, the federal provinces, are also in charge of the site selection for the N2000 network. Austria´s Natura 2000 areas have shares of the Alpine and continental biogeographic region.

The federal provinces handled the designation process of Natura 2000 areas differently. In Lower Austria, for example, Natura 2000 areas have been defined by experts before informing the users, leading to a share of Natura 2000 areas of 20%. Other provinces such as Upper Austria, defined the areas in co-operation with the users from the beginning onward. In that case only 5% of Upper Austria is defined as a Natura 2000 area. This illustrates that area designation is not only driven by 'objective' evaluation but also subject to (political) negotiation.

Austria was considered, by June 2008, to have achieved a level of sufficiency of 88.8 % for site selection for species and habitat types under Habitats Directive, in its territory. In 2008, a total of 58 Natura 2000 sites had completed/agreed management plans with a further 51 in development (EC 2008).

Since then, a total of 218 Natura 2000 sites have been nominated, and they occupy almost 15% of the federal surface (> 12.000km2). Of these areas, 159 are legally prescribed (March 2010).

5.3.1.2   Nature management preceding the Habitats Directive and adaptations to approach

The very first nature conservation laws on the comprehensive protection of nature in Austria were enacted back in 1930.The designation of nature reserves under modern standards commenced in 1950. In the decades that followed both number and area of nature reserves in Austria have risen continually. The Austrian nature conservation laws define a nature reserve as "a natural self-regulative ecosystem with a high biodiversity and structural diversity which maintains the survival of populations of species in their natural habitats." Most of the N2000 areas in Austria was protected and managed for nature conservation before the implementation of the Habitats Directive, but while the management of the many different types of designations has formerly been voluntary, the protection of N2000 areas are mandatory.

5.3.2   Institutional implementation

5.3.2.1   Management plans

Management plans for Natura 2000 are mandatory in Austria. For almost all N2000 sites in Austria management plans have been - or are currently - developed.The Austrian Environmental Agency is responsible for the management plans. They develop indicators and thresholds for the areas and species within in the Natura2000 network, as criteria against which the protection status of the areas can be analysed. Some Provinces have developed standards for the management plans but there are no overall horizontal guidelines for these.

5.3.2.2   Management measures, changes from former management and financial models

In Austria many precious habitats are generally protected, i.e. without having any special designation as protected areas. Hence wetlands, water bodies and their shore lands as well as the Alpine biotopes and glaciers are placed under protection in large parts of Austria. Apart from the areas that are generally protected, there are conservation areas protected by legal ordinances covering 25 per cent of the Austrian territory. The Natura 2000 areas were protected using different instruments. Provinces have purchased or leased land, but mainly they have made contracts with land owners for environmentally friendly use, as described in management plans. Contractual agreements are preferred to legal constraints.

General measures are

- The **regulation** of specific measures for protection is automatically given through the designation of an area for a specific nature conservation type. National parks are the strongest protection category, while Nature conservation parks are more or less similar in protection to Natura 2000
- **Subsidies** for landscape care through land owners in N2000 sites (paid by the province and municipalities)
- **Subsidies** for rural development ((1) management and cultivation plans, (2) biotope conservation, (3) conservation plans, (4) infrastructure for recreation and knowledge transfer, (5) organisation of informative events)
- **ÖPUL subsidies** (Austrian Programme for environmental friendly agriculture) which represent the national implementation of the CAP and includes one measure for the "Maintenance and development of nature conservation essential areas".

In general, existing land use practices are not subject to nature conservation law but to cross compliance measures. For significant changes within land use practices, defined as 'projects', the municipality must be notified on an initialization of the activity in the vicinity of the Natura 2000 site in order for the authority to

evaluate if the activity will have negative implications for the site. The activities relate specifically to agricultural and forestry practices and changes in these, and it establishes the law basis for defining the character if the activities under this regulation. This relates mainly to diffuse emissions of nitrogen and to critical emissions of phosphorous, and includes specific management changes and changes to the state of §3 nature types which are smaller than the size limit evoking protection.

5.3.2.3   Administrative structure, roles and responsibilities

The Natura 2000 areas relate both to the Habitats Directive and the Birds Directive. The responsibility for the designations rests with the nine provincial governments (respectively the Departments for Nature Conservation), who are also responsible for the N2000 planning. In different provinces the user involvement in the designation process has been different, leading to substantial variation in the share of land designated. A region-wide mapping of areas deserving nature protection apart from Natura 2000 is however still missing in most provinces.

The provinces authorize Nature conservation agencies with designing N2000 plans and finally it is again the provincial governments that decide which sites are nominated as N2000 sites. As soon as an area is designated as N2000 site a regional coordinator is implemented by the provincial government. This coordinator should serve as a regional "contact point" and as a communicator between stakeholders and the provincial government. Additionally, the regional coordinator is responsible for the controlling of measures. Nearly all provinces have such coordinators, but in some provinces, such as Lower Austria, they are missing; a fact that aggravates controlling as well as implementation processes and the stakeholder acceptability.

Nature conservation as regards to N2000 areas seems to be widely defensive in Austria. This is to say that innovative projects mainly evolve in areas with active coordinators or in less favoured areas where nature conservation serves as a source for an additional income. In other regions activities serving nature conservation are often seen as a hindrance to everyday agricultural practice. Obviously active and committed coordinators and local politicians that work closely together with the farmers are of major importance. Experts argue that cooperative projects between farmers and experts for nature protection, as fostered via the ÖPUL, played - and still play - a significant role in creating win-win situations for farmers and nature, fostering farmer's acceptance for nature protection. Thus, regional coordinators that support, facilitate and foster planning processes in which farmers or other land owners and experts for nature protection cooperate would be essential for integrating nature conservation and agricultural practices on a wider scale.

After the designation of the N2000 areas hearings, consultations, workshops, information evenings, discussion rounds have been organised by the Department for Nature Conservation of the Provincial Governments – mainly to calm down the - in many cases upset - land owners and citizens. In Austria the debate on the implementation of N2000 areas was and still is a very emotional discussion.

Coordinating bodies are the provincial governments (following the respective Nature Conservation law and Spatial Planning Act) and municipal authorities who are in charge of implications and notifications.

The monitoring is regulated via mandatory reporting to the European Community. Here it is shown which areas have been selected as N2000 areas and whether there has been any deterioration of the protected areas. Meanwhile, an Austrian national monitoring-concept is currently being prepared. Based on this

national concept, there will be specific monitoring practices for the various areas under protection. These should entail both specific, targeted samples as well exhaustive surveys.

5.3.3 Perception of barriers to transposition and enforcement

5.3.3.1 Transposition - negotiation in the designation process

The process of designation of N2000 sites in the Austrian Provinces demonstrates that designations are prone to political negotiation. In one province the areas were defined by experts without user involvement. This resulted in 20 % of the provincial territory to be designated. In another Province the users were involved in the process, and here, the resulting share of the area was 5 %. A constraint is that a region-wide mapping of areas which require nature protection, outside N2000 is still missing.

5.3.3.2 Organisational structure, roles and responsibilities

When an area is designated as N2000 site, a regional coordinator is nominated by the provincial government. This coordinator serves as a regional "contact point" and as a communicator between stakeholders and the provincial government. Also, the regional coordinator is responsible for the control of measures. Nearly all provinces have such coordinators. In some provinces, such as Lower Austria, they are missing; a fact that attenuates the control as well as the implementation processes, and also the acceptance by stakeholders. Especially the active protection relies to a major extent on active coordinators and politicians, as the national approach to nature conservation is defensive, and nature conservation is often perceived as a contradiction to agriculture.

After the designation of the N2000 areas hearings, consultations, workshops, information evenings, discussion rounds have been organised by the Department for Nature Conservation of the Provincial Governments – mainly to calm down the - in many cases upset - land owners and citizens. In Austria the debate on the implementation of N2000 areas was and still is a very emotionaldiscussion.

In those areas where farmers and other land owners were involved in the designation process, stakeholders are more open to measures related to nature conservation. Regional coordinators play an important role as regards to mediating the benefits of nature protection to farmers. Experts argue that cooperative projects between farmers and experts for nature protection, as fostered via the ÖPUL, played - and still play - a significant role in creating win-win situations for farmers and nature, fostering farmer's acceptance for nature protection.

In general, nature protection in Austria has become widely accepted by the various stakeholders. Still, the political will, especially at the local level, could and should be improved. Local authorities should be actively supported by the agricultural chamber in order to become more active and committed themselves. This could avoid the often arbitrary outcomes of environmental impact assessments.

5.3.3.3 Adequacy of measures and funding structure

A more coherent nation-wide handling of the Habitats Directive and of the management of N2000 areas as well a nation-wide bio-physical mapping is needed to reduce the impact of individual (political) interests and foster a common, nationwide monitoring and amelioration of the state of the environment.

According to experts, a coherent strategy for nature protection is lacking due to the different approaches in the Provinces. Especially more cooperation and communication between the parties involved, e.g. farmers and national or municipal agencies, agencies and experts is needed, as well as more financial resources for

efficient implementation. In Austria the financial budget for nature protection as regards to forestry is rather low (compared to agriculture). As areas that are not cultivated anymore are usually afforested, also the forestry sector should increasingly contribute to nature protection.

According to experts, landowners hardly get financial support for nature conservation. Only few projects get money out of the LIFE funds, usually in areas managed by rather committed coordinators. Also, larger farms seem to get more money related to the Habitats Directive, by setting aside a high share of the land they own. According to experts, this funding could be used more efficiently by supporting (small) farmers who actively maintain cultural landscapes and biodiversity. Most activities related to nature protection are, however, financed via the agrarian budget for Rural Development, mainly via the agro-environmental program ÖPUL .

In general experts claim that N2000 areas are of special use as regards to maintaining biodiversity and the characteristics of specific landscapes. More challenging are those areas which deserve nature protection but are not designated as N2000 areas. In this regard the Austrian agro-environmental programme (ÖPUL) has proved more effective. It ensures a slow-down of land use change in the sense that areas which are difficult to manage, such as for example steep slopes, can be maintained, and further afforestation (that potentially reduces biodiversity) or degradation can be partly prevented.

5.3.4   Land use and landscape impact

According to the respondents, the Habitats Directive implementation has hardly changed the land use and landscape in Austria as most of the areas were already protected before the implementation of HD.

5.4 Greece

Respondents:

> NGGO: Representative of World Wildlife Fund for Nature Hellas-WWF Hellas
>
> CA: Employee of Special Environment Unit - Ministry of Environment, Energy and Climate
>   Change
>
> CA: Managing Authority of the Rural Development Programme of Greece - Unit B4
>
> CA: Member of Management Authority Council (employee of Central Unit B4)
>
> LRA: Directorate of Environment and Spatial Planning of the Decentralized
>   Administration Aegean

5.4.1 Transposition

5.4.1.1 *Designation process, timeliness and completeness*

Like a number of other member states, Greece was delayed in the transposition of the Habitats Directiveto domestic legislation. Infringement procedures were initiated by the EC,and Greece was judged in 1997 for having failed to adopt the necessary legal measures and to communicate them to the Commission (Andreou, 2005). Following, the Habitats Directive was incorporated in the national Greek legislature in 1998 through a Joint Ministerial Decision, which translated the articles of the directive closely, however, not without weaknesses with implications for implementation (ibid). In 2011 a law on the National System of Protected Areas was adopted, including the provisions for the Habitat Directive implementation.

In 1992, with the adoption of the Habitats Directive, Greece had to recognize and declare SCIs for the protection of habitats and species, and also provide information for SPAs (regarding birds). For this purpose, the program LIFE-NATURE was developed by the Greek Biotope/Wetland Centre and Biology Departments of the Universities of Athens, Thessaloniki and Patras, for identifying candidate areas NATURA 2000. Greece proposed the first SCIs to the European Commission and supplemented the list of SPAs in 1996 and 1997. The network of SCIs, as it stands today, derives from 11 consecutive additional submissions from Prefectures, or data updates from 1999 to 2012, respectively. The formal adoption of the list of SCIs by the EC took place in 2006, and according to the European Commission, unfinished/ pending issues in Greece, related to the completion of the landed SCI network were of small significance, and they represent primarily scientific concern for species and habitat types. Hence, today the Greek NATURA 2000 network comprises 419 locations (241 SCI and SACs and 202 SPAs), while 24 areas are both SCIs and SPAs. The extent of the SCI is 2.807.512 ha, covering 16.3% of the Greek terrestrial area and 5.7% of its territorial waters, while the total network (including SPAs) covers 27.2 % of the terrestrial territory.

The majority of areas in the NATURA 2000 network are very extensive and due to the high level of biodiversity in Greece, these areas include a large variety of habitat types and species habitats. For the greatest part of the NATURA 2000 network, detailed mapping of habitat types has taken place, within the above mentioned project "Identification and description of habitat types in areas of interest for nature conservation," (1999-2001). As part of this project, detailed maps of vegetation habitat types were produced, at a scale 1:50.000 and 2:20.000. One part of the NATURA 2000 network areas are classified as protected under forest law. Moreover, 25% of the NATURA network is designated according tothe former nature protection law from 1986, as in force after the adoption of the new law in 2011. These two areas have a very high percentage of overlap.

In 1999 a Law on Spatial Planning and Sustainable Development was adopted, seeking to take the step from protection to management. By the provisions of this law, Management Authorities for the administration and management of protected areas were established.An amendment from 2002 provided for 25 Management Authorities (MAs), adding to two already established under the 1986 law. This designation did not follow the typical procedure, whereby the formal designation of the MA is to be followed by a Joint Ministerial Decision on the framework of action of the individual MA. This is partly the reason why only one management plan has been adopted to date.

Later acts have been adopted on the management of N2000 sites: important is theLaw from 2011 laying down the National System of Protected Areas, which consists of all areas covered by one or more of the existing categories: Strict nature reserves, Nature reserves, Natural parks, National parks, Regional parks, Habitat/species management areas (Special Areas of Conservation- Special Protection Areas -Wildlife refuges), Protected landscapes / seascapes, Protected natural formations etc., in order to effectively protect biodiversity and other ecological values. The supervision of the operation and the central coordination of the National System of Protected Areas are under the responsibility of the Ministry of Environment, Energy and Climate Change.

This law specifies all the different classes of nature and landscape protection in Greece, and thereby also defines the SPAs and SCIs. It also establishes the method for characterization of protected areas, and matters related to the management of protected areas are decided - as amendments to former legislation. It lays down the regulation of the protection and management of the SACs, in compliance with the Habitats Directive, and the protection and management of areas of the NATURA 2000 network in general.

By this law, 239 SCIs have been adopted as SACs. At that time, 29 MAswas established, covering about 23% of the NATURA network, or 1.000.000 ha.

Recently, in 2013,a new law has however been adoptedwhich reduces the 29 MAs to 14 MAs. The minister of the Environment, Energy and Climate Change holds the authority to supervise on their operation (the decision specifies regulations of internal operation, service and personnel, financial management, administrative board, project execution, contracts, etc), and based on this the new MAs has administrative and financial autonomy.

5.4.1.2   Nature management preceding the Habitats Directive and adaptations to approach
In Greece, various types of natural areas, such as forests and wetlands, have been recognized as areas under special protection status, since 1937, while a typology of protected forests were already introduced in 1929. Subsequently, protection zones of various categories were established responding to both national and international requirements and conventions. Until 1986 this included a number of laws in the Greek regulation concerning National Woodland Parks, Aesthetic Forests, Natural Monuments and Landmarks, Wildlife Refuges, Controlled Hunting areas and Game Breeding Stations. Moreover, international protected areas including e.g. Ramsar wetlands have been incorporated in laws.

A new legal framework for biodiversity and nature conservation was created with the adoption of the Law 1650/1986, whereby National Parks, Nature Reserve Areas, Absolute Nature Reserve Areas, Protected Forests, Protected Significant Natural Formations and Landscapes, and Eco Development Areas were established. Such areas were declared as protected either by national legislation or by international conventions, which the country had ratified through international initiatives or European Directives. These can be divided into Protected Areas by National Law", "Protected Areas at the International Level",

"Protected areas at the European level". The law followed the entrance of Greece into the EC, as a means to implement the Birds Directive. It provides for the classification of protected areas, the regulation of the objects of protection and conservation, the designation criteria and the protection and conservation of native flora and fauna species.

Changes to the approach to nature management were thus relatively small in Greece, when introducing the Habitats Directive, as it was merely one new designation on top of many others, and with a substantial overlap to other designations. The management of protected areas was strengthened with the enlargement of the Management Authority institution through the Law on Spatial Planning and Sustainable development from 1999, moving from two to 25 (later however reduced again to 14), and with this also instituting a proactive approach to management. Also, the extent and delimitation of the N2000 areas seem to have required a more specific approach.

5.4.2 Institutional implementation
While protection and management of protected areas has been around since the 1930s, the legislative definition and criteria has developed in the later period from 1985.

5.4.2.1 Management plans
In the Law on the National System of Protected areas from 2011 "Conservation of biodiversity and other provisions" it is stated that management plans are compiled for the protected areas, determining the requisite organizational and operational measures for preserving the protected assets, specifying the terms and restrictions for carrying out activities and executing projects, and spelling out directions and priorities for the implementation of projects, actions and measures.

The management plans are accompanied by action plans, which specify the necessary measures, actions, projects and schemes, phases, cost, funding sources and entities, as well as the time-frame for completion, as well as their implementation agents.

The management plans will be approved through a Ministerial Decision (Minister of Environment, Energy and Climate Change) or Common Ministerial Decision (CMD) of all relevant Ministers (for Absolute Nature Protection Areas, Nature Protection Areas, Nature Reserves, SACs and SPAs), or through a Decision of the General Secretary of the Decentralised Administration for Wildlife Sanctuaries and Landscapes.

The specifications concerning the exercising of agricultural and fishery uses are determined by the relevant Ministries ("Ministry of Environment, Energy and Climate Change", "Rural Development and Food" and "Maritime Affairs, Islands and Fisheries") respectively.

The specifications and content of the management plans are determined by decision of the Minister of Environment, Energy and Climate Change, issued -at the latest - within a year of the entry into force of the act. In 2008, only one Natura 2000 site had an adopted management plan.

In conclusion, the law states that management plans and their approval are carried out either by the Minister of Environment, Energy and Climate Change or by decisions of the General Secretary of Decentralized Administration, depending on the category of the protected area. This is to happen through the designated Management Authorities. However, with the recently adopted law providing for a structural reform, the responsibilities of some of the former MAs have been transferred to de-central administrative authorities, mainly related to the Environment and Spatial Planning departments.

5.4.2.2   Management measures, changes from former management and financial models

General regulations are applied to both the Natura 2000 areas and the areas in the vicinity of N2000 areas, in terms of assessment of their implications (e.g. construction activities), as also implemented in the new law of 2011.

Regarding the protection of NATURA 2000 areas, there are presently horizontal restrictions and prohibitions, not only in the Law from 1999 and 2011, but also in the harmonization of the Birds Directive for the designation types of SPAs, in the Special Frameworks for Land Use Planning and Sustainable Development for renewable energy, for industry (on Compulsory Expropriations and City-Planning) for tourism, for aquaculture, as well as in a Law for renewable energy in 2010, in agri-environmental measures, and in environmental licensing .Part of the Natura 2000 areas is governed by the forest law.

Pro-active management of the areas is mainly through projects, supported predominantly by EU financial support.

Exclusive financing of NATURA 2000 areas or their Management Authorities does not exist. Funding is usually imbedded in various programs, directed by different actors, belonging to different areas of support, and with different weighting. Thus, funding, especially through financing from EU programs—such as the Operational Program "Environment" 2000-2006, the Operational Program "Environment - Sustainable Development", ENVIREG programs and the rural development programs (agri-environmental measures)—was used by various actors to implement programs, related both to strengthening the institutional framework and to covering costs of conservation and management in protected areas. Moreover, conservation and management costs are covered, for the most part, by Operational Programs or community programs (e.g. LIFE), i.e. EU money with national participation, and, to a lesser extent, by national resources (e.g. the Green Fund). Research states that the MAs receive their funding almost exclusively through co-financing from EU project funds (Scopa 2012).

Under the first (2000-2006) Rural Development Programme some measures were successfully applied. The agri-environmental payments took up 190 million € corresponding to 7% of the budget, but only absorbing 68 % of these, while first afforestation measures on agricultural land took up around 6 % of the budget, absorbing 95 %. Moreover, some measures were available for geographically targeted areas, which included measures for N2000 areas, and resulted in management changes (extensification) in smaller areas.

During the second phase (2007-2013), the second axis: Improvement of the environment and the countryside took up 34 % of the budget. This also covered geographically targeted measures, including for Natura2000 objectives. 86000 ha or almost 20 % of the N2000 area received agri-environmental support.

5.4.2.3   Administrative structure, roles and responsibilities

The Ministry of Environment, Energy and Climatic Change isresponsible for the designation and planning of the Nature reserve areas, and they have the overall control of the Natura network, while the Management Authorities (MAs) are responsible for their management, monitoring and related studies.They are private legal entities, and consist of an administrative board of representatives of central and local administration, local stakeholders, NGOs and scientists, as well as a directorate with three departments. These are proposed by relevant institutions and (should) have scientific, technical and administrative support. The participation of local communities should be ensured by the MAs, which have the ability to take decisions and implement them. MAs can also be existing state agencies or special agencies set up for the purpose, higher education institutions and public research centres or other public or private legal entities of a non-

profit nature, which have distinguished themselves in the field of nature or generally environmental protection. The regulation of activities such as hunting, fishing, logging etc . is with the Forest District Offices, under MoA - especially for the areas designated under the Forest legislation (Apostopoulou & Pantis 2009). There is a major problem of overlapping responsibilities between the MAs and the Forest Inspectorate.

As mentioned, the MAs have been reduced from 25 to 14 in 2013, under a major structural reform. Thereby, directorates for the coordination of protected areas have been establishedat the decentralized level.

The Committee 'NATURA 2000' was established in 1998. It is the central scientific advisory body to the State for the coordination, monitoring and evaluation of policies and measures for the protection of Greek biodiversity. This includes the monitoring and evaluation of the programs, activities and events of all relevant ministries, agencies and entities of the public sector for protected areas, species, habitats and generally the natural environment. It is also expected to produce guidelines for the structure and training of the administration, and to advise on the annual allocation to MAs from national as well as EC funds. It consists of scientists of academic or research institutions, experts related to the nature and the ecological requirements of the protected areas, as well as representatives of environmental organizations with experience, scientific expertise and competence in matters of ecology and biodiversity management.

According the respondents, the NATURA 2000 Committee (20 members) has only been concerned with the scientific part of the Natura network, and according to former studies the committee lacked any supporting infrastructure (Andreou 2005), and Apostopoulou&Pantis (2009) argue that it has been defunct since 2004.

The Ministry of Environment, Energy and Climate Change and the NATURA 2000 Committee act at a national level. At the regional level the adequacy of the legislation appear problematic. Often, different approaches and views are expressed and pursued on the same subject. Local authorities are represented in the Management Authorities, at the regional level. In general, there seems to be a problem of lack of coordination, and problem-solving processes are apparently missing, leaving trouble-shooting to individuals.

5.4.3   Perception of barriers to transposition and enforcement

5.4.3.1   *Transposition- overlapping jurisdictions, unclear roles and responsibilities*
Although the concept of the protection of nature was not unknown in Greek law and, despite the 1985 transposition of the Birds Directive as well as the ratification of international treaties for the protection of natural resources and the fairly extensive environmental legal framework for the protection of nature, both through the Constitution and through spatial planning and many other pieces of legislation, in Greece the transposition of the Habitats Directive was beset by delays and problems. Nevertheless, with the terrestrial part almost complete, its implementation as regards the areas covered is now judged to be satisfactory.

After a long period of incomplete transposition, the Greek transposition of the Habitats Directive was adopted in a law in 2011, which transposed the articles in the Habitats Directive and amended former transposition of some of the issues. Through this, the existing legislation has been supplemented, the legal framework has been modernized and new parameters to nature protection have been introduced. Respondents claim that the concept of nature management has been reinforced and has led to an

enhancement of the protection of certain species and habitats, and modernized and supplemented the institutional framework, including through the process of impact assessment. However, there is still a lack of alignment of legislation, to provide for clear jurisdictions, roles and responsibilities of management and decision-making. There is a lack of coordination between ministries, drawing lines back to the formerly argued institutional rivalry between the Ministry of Agriculture and the former Ministry of Environment, Physical Planning and Public Works (Andreou, 2005). Also, overlapping legal frameworks of the Forestry regulation and the Natura 2000 regulation is apparent.

Respondents do not, in general, consider the legal basis as adequate for management, due to a too large number of laws and executive orders, implementing decisions and decrees, all contributing to overregulation and excessive legislation. While the attempted protection of the NATURA 2000 network continues, the constant bombardment with legislation – at times contentious and controversial - does not solve the issue, either as regards delays in the deadlines to be met, or as regards actual protection of these areas from degradation. On the other hand, it is also claimed that appropriate legislation at the local level is missing.One CA observes that 'codification of the legislation should firstly take place, followed by new legislation to avoid duplication of subject or competences'.

A drawback is that there are no overall conservation targets for each of the areas with commitments (regional objectives should have been defined by 2012), and many management plans have not yet been produced and implemented.

Scopa (2012) states that there are institutional problems, such as in the legal form of the area designation texts, in the clarification and regulating responsibilities, in the clarification and adjustment of legal issues allowing proper functioning of the Management Authorities (staffing, financial transactions, guarding etc.). Vokou (2012) adds to this concern for institutional barriers that Management Boards are malfunctioning.Lack of approved management plans are detrimental, and the collaboration and coordination with competent decentralized agencies unsatisfactory.

The situation in Greece is arguable topsy-turvy, as the Management Authorities submit recommendations and measures, with no corresponding management plan. As far as monitoring issues are concerned, the current monitoring practice was considered inadequate and suffering from delays; the general opinion was that there is some monitoring, but not everywhere, and it is not being performed in a uniform fashion.

5.4.3.2   Organizational structure, roles and responsibilities

Also, the structure of the administration and their roles and responsibilities are not clear and the various units, such as Management Authorities (MAs) at national and local levels, the Natura2000 commission, and the Special Service, do not share a common strategy and line of action. Problems of lack of coordination and troubleshooting/problem-solving are widely acknowledged.

Regarding the structure of the enforcement institution, respondents restate the problem of lack of coordination. Environmental legislation is generally viewed as not taken into account by competent entities, licensing procedures and planning. As far as the implementation measures are concerned, there are few management plans (only one approved) by management Authorities, while management plans for the other N2000 areas are still pending. In general, targeted environmental planning does not seem to exist, and a lack of basic objectives is also quoted.

Management Authorities do not always exist, but where they do, the representative does not yet have jurisdiction. In cases of forest conservation and protection overlaps exist - seemingly especially between the Forest Service and the MAs. It is argued that a strong central administration on environmental issues in Greece and a new service that may coordinate all MAs within a common legislative framework, with specifications, defined responsibilities, action plans etc. are necessary for improvement. In addition, a technical service to provide special studies, publication of tenders etc. is also called for.

Andreou (2004) argued that institutional rivalry characterized the relationship between the Ministry of Agriculture and the Ministry of Environment, physical planning and public works and the distribution of competences were not clear.

5.4.3.3   *Adequacy of measures and funding structure*

The production of management plans has not been accomplished in most areas, and Management Authorities(MAs) are only in appointedfor 29 areas, and as mentioned above, usually not with sufficient authority.

The Operational program (Environment & Sustainable Development 2007-2013), which is the reference document for EU support in the period, mentions in the SWOT analysis following:

- • Non-completion of the thematic strategies aimed at halting the loss of biodiversity
- • Non-completion of the declaration of protected areas according to the national legislation
- • Problematic coordination of MAs for Protected Areas
- • Limited integration (with the sectorial ministers' policy) of action for the protection of nature and lack of an integrated plan
- • Risks of the reduced viability for MAs for Protected Areas due to the lack of stable income.

Also, respondents state that even if Environmental impact assessments have improved, Greek legislation does not sufficiently protect N2000 areas from activities taking place outside the N2000 areas.

Barriers are related to the overlap and lack of clarity in roles and responsibilities as mentioned above, but also lack of transparency, e.g. in mandatory access to data and information on licensing. According to respondents there are continuous violation of forest law, foreshore and breach at the administrative courts, as well as encroachment on public land and land reclamation - every year hundreds of fines are given for unauthorized use.

Also, insufficient knowledge of the species and nature types posed a problem, while protection enforcement mechanisms were insufficient or lacking. This seems to be the case even today, as it is claimed by respondents that there are no available figures on the current ecological status of species and habitats, and that the current monitoring system is delayed and inadequate.

The main sources of finance for the Habitats Directive implementation derive from the EU programs. This support is derived especially from the RDP, but also from the structural funds incl. LIFE. Funding intended for NATURA 2000 areas, as compared for other lands, is not high priority. For areas where Management Authorities have been designated, funds are sufficient; this is however not the case for the other Natura 2000 areas. These funds are specifically intended for the implementation of the Directive and almost all of it are from European sources (resources and programs committed for this purpose and, therefore, not available for other uses). Furthermore, even the functioning expenses of the MAs, which should have relied on national resources, stems from the European Union. Asked to the extent to which other sectors

influence the use of resources, onerespondent answered "all of them and too much ". Vokou (2012) argues that the piecemeal acquisition of funding is a complex, time-consuming and bureaucratically voluminous process, and it is detrimental to the realization of the essential actions of protection by the MA. Their funding exclusively derived this way has consequences for their proper functioning.

5.4.4 Land use and landscape impacts

According to respondents, the Habitats Directive implementation has not changed the land use and landscape in the country, but the general consensus on this was that there has been an increase in land protection in the designated areas, and establishment of common rules and restrictions. This may in some cases have prevented disturbance from development projects.

5.5 Romania

Respondents:

> EX: Ecologist formerly working with the MoE, now as protected area expert in biology
>
> DM1: Head of Biodiversity Department MOE
>
> DM2: Decision maker in Protected Area Department MoE
>
> CA: Coordinator in Romania Water Authority
>
> LRA 1 and LRA2: Representatives of Protected Area Departments in two Provinces
>
> LRA3: Head of Danube Delta Biosphere Reserve Authority
>
> LRA4: Head of a Natural Park Administration

5.5.1 Transposition

5.5.1.1 *Designation process, timeliness and completeness*

The transposition of the Habitats Directive was closely related to the accession process. During first phase of transition (1990/1999), a dominant view was that investments in biodiversity conservation and reduction of the environmental liability of the existing built infrastructure, would significantly limit the rate of macro-economic reform and economic growth. Policy and strategic objectives of Biodiversity action plans were aligned to the EU legislation, however without direct links, and the policy area received poor consideration in the pre-accession phase (2000/2006).

The Habitat and Bird Directives was firstly adopted within the domestic regulatory system by Law 462/2001 with subsequent changes in the former domestic legislation. In particular the Habitats Directive has been fully transposed in the domestic regulatory system in two steps: i) firstly by issuing theGovernment Emergency Ordinance (GEO) no57/June 2007 and; ii) secondly by issuing the Law 49/April 2011. These legal developments have created conditions to launch a specific, complex and critical process consisting in: a) the assessment (starting by 2004) of the status of the existing network of protected areas and the habitats (identified and described according to the CORINE classification by Donita et al. 2005), wildlife flora and fauna outside protected areas and the establishment of provisional "important conservation sites" (SCI) according to the Habitats Directive and "special areas for bird protection " (SPA) according to the Birds Directive (BD); b) discussion and getting approval by major stakeholders – landowners; local, regional and national authorities in charge for land and environment policies development and implementation; scientists, managers and NGOs; c) legal designation by Government Resolution (GR) 1284/2007 of the first set of 108 of SPAs and by Order of the Minister (OM) 1964/2007 the set of 273 of SCIs as the national contribution to the EU-N 2000 network; d) enlarging the number of SPAs up to 148 and the number of SCIs up to 383 by issuing GR 971/October 2011 and OM 2387/November 2011.

By the end of 2011 the process of identification and designation the NATURA 2000 sites (383 SCI and 148 SPA) on the Romanian territory was completed. According to proposals the SCIs will become SACs by 2016, thus leading to an effective functional network of N2000. This network consisting in a total of 531 sites extends over 5.3 million hectares (22.6% of total land area) across the country and types of habitats or ecosystems. There is a significant overlap in the distribution of the designated SPAs and SCIs, as well as among them and former protected areas (e.g. natural and national parks, Biospere Reserves (BRs), Ramsar sites, natural monuments or strict protected areas). According to respondents, this implies that the legal framework for implementation of the Habitats Directive is complete. One respondent (LRA) however, disagreed, by claiming that the transposition was unclear in various aspects: a) some sites have less than 1

% representation of the priority habitats for which it was designated, b) that specification of permitted activities is unclear especially in urban areas within N2000, c) that priority goals of the sites are not specified and d) integration with other policy areas have not been secured.

Other respondents (CA+LRA) mentioned that based on professional experience, the protection suffered from lack of clarity regarding how "vicinity of the protected area" was defined, while a respondent (CA) stated that the AI was protecting N2000 areas against negative impact regardless of distance.

The current structure and land area of the N2000 network of sites from the Romanian territory is expected to allow that both the habitats and the species which are listed in the annexes to the law, to be protected and the ecosystems or landscapes integrity to which they belong, to be maintained or / and restored if, the management plans and measures will be properly designed, developed and implemented.

5.5.1.2   *Nature management preceding the Habitats Directive and adaptations to approach*

The concepts concerning "nature protection and the initiatives to designate first protected areas and natural monuments" (e.g. an endemic species with very restricted distribution; a single old tree / age > 250 years; a particular geologic formation) were formulated or adopted by natural scientists, and implemented since the beginning of 20th century.

In 1930 the first "Nature Protection Law" was issued and, the "Commission for Nature Protection" (CNP) was created in the National Academy, in charge for coordination of the implementation of the Law. In the late 1940s and beginning of 1950s the former regulatory system was changed to allow for land expropriation and collectivization. The Commission for Nature Protection (CNP) applied, at least between 1950/1955 the same concept regarding protection of identified spots of "pristine nature".

The land use programs applied between 1965-1989 aimed for arable land expansion (mainly by wetlands conversion) and intensification as well as urbanization and industrialization, on one side, and better management and even slightly increases of forested land, on the other side, and required significant changes in the legal system. It was however realized that under the new circumstances only setting aside relatively small number and size (<< 1% of land area) of more or less untouched spots of nature did not help for effective and long term nature protection.

The Law no. 9/ 1973 on the "Protection of the Environment" applied the emerging innovative concepts concerning the complex and dynamic relationships among environment, nature and socio-economic systems. During first phase of transition (1990/1999), however, the most influential stakeholders considered that any investments in biodiversity conservation and reduction of the environmental liability of the existing built infrastructure, would significantly limit the rate of macro-economic reform and economic growth.

Hence, nature conservation received only poor consideration in the first pre-accession period. While the policy and strategic objectives of domestic strategies and action plans were more or less similar with those of the EU strategies, it was not possible to identify direct and clear bindings with EU-legislation, in particular with Habitat and Bird Directives.

5.5.2   Institutional implementation

5.5.2.1   Management plans

According to proposals the SCIs will become SACs by 2016, thus leading to an effective functional network of Natura 2000. In the meantime the site specific management plans, including the present state, the target for favourable protection status, detailed site maps, proper package of specific measures and specific action plans have to be developed. The domestic legal time frame is two years from the assignment of administrators or custodians to the N2000 site. This assignment has happened for quite a large number of protected areas in 2012 (CA).

It is mandatory according to L 49/2011 that any regional, county and municipal planning has to consider the targets, site maps and measures of the approved site specific management and action plans or to adapt it accordingly if the N2000 plans will be finalized and approved later.

It is also mandatory that the management plans to follow the strategic environmental assessment procedure before entering into operation, and in addition, for any proposed change inside N2000 sites or for new projects around the sites the assessment of the potential implications should be carried out.

Primary and secondary stakeholder participation during both elaboration and implementation of the N2000 management and action plans is a very important instrument which is enforced by law 49.

5.5.2.2   Management measures, changes from former management and financial models

The funds for development 300 of the N2000 management and action plans have been secured within POS-Environment, Axis 4 for a total amount of 191,098,548 Euro from which 90% or 171,988,693 Euro comes from the European Fund for Regional Development (EFRD) and the rest of 10% from domestic budget. By June 2012 has been reported an allocation of 114 million Euro to 98 projects (www.posmediu.ro).

As far as the stakeholders are required to respect and implement site specific protection measures, it is crucial that direct compensatory payments are available to maintain public understanding and trust with respect to the N 2000 network. In that regard the NPRD/ 2007-2013 addresses N 2000 sites through scheme 213/ Natura 2000 payments on agricultural land, and Scheme 224/ Natura 2000 payments on forestry land, with a total available fund of more than 16 million Euro.

Management plans for the sites that were already designated in 2007, are delayed. The production of the plan is usually funded by national or European projects, but most sites do not have an administrator appointed (LRA).

Due to the fact that N2000 management plans are not yet ready(by April 2013 there are 5 Natura 2000 management plans approved by law), meaning that there is much uncertainty about what conservation measures should be implemented by farmers and forest landowners as the payments from S213 and S224 will not be eligible. However the possibility of allowing payments related to N 2000 sites from other schemes (e.g. 214 and 221)has been accepted, based on the existing management plans of protected areas, which are currently part of N2000 network, or based on management contracts with landowners.

Respondents (CA) state that information on conservation measures and requirement for obtaining a favourable conservation status is not sufficient, and asked about measures to enhance implementation, CA points to the development of minimum conservation measures for each habitat/species nationwide for immediate application. CA states that there are still missing legislative issues to be tackled, e.g. the

professional experience of administrators or custodians of protected areas, and the production of a draft management plan, and the outputs of public debates and monitoring & research.

5.5.2.3 *Administrative structure, roles and responsibilities*

The Ministry of Environment is in charge for coordination the joint (interministerial) development of policies and instruments required for successful implementation of Habitats Directive and BD in Romania.

In particular, the ministerial directorate of Nature Conservation, Biodiversity and Biosafety is the national coordinator for the development of the N 2000 network and its operation.

The effective coordination of the implementation of N 2000 network of sites at national, regional and county scales is the responsibility of the:

- National Environmental Protection Agency (NEPA),
- Regional Environment Protection Agencies (8 REPAs),
- County Environment Protection Agencies (42 CEPAs),

The National Environment Guard (NEG) is responsible for the control and monitoring of the compliance with the legislation in the protected areas. The Danube Delta National Institute for Research and Development is the technical coordinator for the validation process of the N2000 sites. For sites that are located in two different regions, NEPA is responsible, while sites located in a single region is under the REPAs jurisdiction. Monitoring of the N2000 sites is the responsibility of the NEPA in collaboration with the Ministry of the Environment, and they also provide information to the public and to stakeholders on the obligations under the Habitats Directive.

Before initiating the development of site specific management plans it has been required to establish the administration or custody for each of them. By 2012 42 administrators and 304 custodians have been selected and contracts signed. They represent as administrators: local authorities (4), ROMSILVA and its regional offices of forest administration (26); NGO (8); universities or research institutes (1); Commercial Societies (2) and others (1), and as custodies: local authorities (20); ROMSILVA and its regional offices (94); universities and research institutes (25); Commercial societies (7); NGO (134); local environmental agencies (11); consortia (6) and others (7)

For sites that require the establishment of a management structure (Natura 2000 sites that are also scientific reserves, national parks, nature parks, natural monuments, nature reserves etc.), the management plan will be developed by the appointed administrators in consultation with the Advisory Board, with the scientific approval of the Scientific Council; its legal approval is done by government decision on a proposal from the central public authority for environmental protection. For sites that do not require administration structures, the management plan shall be prepared by the custodians, noticed by the Environmental Protection Agency and approved by the Ministry of Environment. If the site does not have administrator /custodian or the elaboration of the management plan is funded by national and European projects, the management plan can be produced by other entities (consulting firms or other commercial companies, universities, NGOs etc.) and the administrator / custodian and the stakeholders (authorities governing activities within the site, local residents, owners / land managers of the site and its vicinity) have to comply and implement it.

Hence, the site specific management and action plans development and implementation are the responsibility of the selected and legally bound administrators and custodians, but a large number of N2000 sites have not yet any administrator.

Regional and local agencies propose areas for inclusion in the N2000 network and they organize campaigns and public consultations.

5.5.3   Perception of barriers to transposition and enforcement

5.5.3.1   Transposition

The legal transposition process in Romania was related to the accession to the EU, and according to the commitments undertaken by Romania regarding the protection of nature, there was no transitional period for transposition and implementation. Hence, the transposition into domestic legislation took place almost immediately after accession, in 2007.However, lack of development in the organisational and institutional capacity to implement the EU legislation ensued, and large delays and low efficiency in the finalisation of the SCIs and implementation of the nature conservation policies and well as the agri-environmental measure followed.

Regional respondents also note various problems in the legal transposition. In their opinion there is an incomplete coordination to existing sectorial policies; e.g.the Forest policynorms regarding forest activity has not been adapted in protected areas. Also, contradictory interests have not been aligned - the MoE, for instance, aims for protection against hunting in protected areas, while the Ministry of Agriculture and Sustainable Development tries to allow hunting in National Parks.

The distinction between the N2000 sites and other types of protected areas is not sufficiently clear, and there may be partial overlaps between N2000 areas and other protected areas, which confusethe managers and stakeholders. According to LRA2 the delimitation of the N2000 areas is drawn rather arbitrarily, and the borders are not known by the cadastre, or by major investors.

The sufficiency of legislation is also questioned by theCA and LRA2 respondents regarding the lack of definition of "vicinity of the protected area" which makes the obligation of impact assessment unclear.

5.5.3.2   Organisational structures, roles and responsibilities

One issue mentioned by several formants is that proper implementation is prevented by insufficient staff and lack of skills and trained personnel at all levels. This is enhanced by a lack of a national strategy and unified approach to all protected areas. The provisions for delegation of tasks to subordinate organisations to ensure management are available but not happening due to lack of expertise and resources. Thus most of the protected areas do not yet have an administrator or custodian nominated.

This is felt at the central level where major budget cuts have led to abolishment of specialised agencies, which - apart from creating this important overall strategy - could have delivered the skills for attracting additional EU funding. Also at the regional and local levels the environmental protection authoritiesis in need of specialised personnel for issuing authorization and environmental permits.One problem is that economic agents do not use the proper information and practises before initiating major actions in protected areas such as feasibility studies and land acquisition, also demonstrating conflicts of interest between different stakeholders related to the use and management of N2000 sites, particularly between

those aiming to make economic profit from activities conducted on the protected areas/ N2000 sites and conservationists, - and lack of mechanisms to solve them.

Custodians may also postpone major projects during longer periods, as their consent is necessary for implementation, and according to the LRA1 too many legal restrictions and too many laborious procedures govern the activities in N2000 areas and their neighbouring areas.

A specific problem is the poor training of some persons in institutions responsible for implementing Habitats Directive and the low level of awareness and responsibility of those employees, which often result in a formal implementation of specific laws for nature conservation; some tasks being performed only in order to respond to the requirements imposed by the legislative harmonization at EU level, without taking into account specific conditions and requirements of sites.

LRA2 questions the modality of granting custody, and the CA respondent thinks that the selection and appointment of administrators/custodians presents a gap in legislation which has to be addressed e.g. by considering more the professional experience and the existence of a draft management plan, which could substantiate the request for award of custody of the protected area. The CA2 respondent claims that some NGOs are only formed in order to get access to funds, rather than to push conservation interests. While the ministry controls the signing of administration/custody contracts, they do not control the funding, as this is only obtained through the SOP-ENV and the National Environmental Fund.

5.5.3.3   *Adequacy of measures and funding structure*

Management plans should follow 2 years after signing the administrator/custodian contract, but respondents (DM1 and LRA3) state that the process is significantly delayed. Only a few sites have already a management plan and many are under preparation. The CA state that quite a large number of protected areas were given in custody in 2012, while the LRA1 claims that most sites do not yet have an administrator. Fact is that for the total 531 SCI and SPA by 2012, 346 have an administrator and/or custodian.For the remaining areas, the EPAs are responsible for providing minimum conservation measures.

There is however no information on specific conservation measures, as they have not been conceived yet.

A main barrier in the implementation process identified by respondentswas the inappropriate organization of the public consultation debates in the designation of the N2000 areas. This related among others to the arbitrarily drawn boundaries of areas, and also to the lack of information, public awareness raising and dialogue with land owners by the EPAs. Thus, land owners often consider N2000 sites a barrier for their economic development and hardly accept nature conservation measures. Moreover, it is difficult to speak about implementation of the N2000 measures in absence of an appropriate financing of this process and the lack of human resources to apply the required measures.

Lack of funding for human and material resources are mentioned by respondent as a major barrier to the implementation process. In addition, the time lags between the designation of the sites and the adoption of management plans effectively hinder the possibility of receiving compensatory payments for farmers and other land owners. This has added to a declining understanding and trust regarding the N2000 network.

5.5.4   Land use and landscape impact

Regarding the impact of Habitats Directive implementation, the respondents state that no landscape changes have yet taken place as an effectof the Habitats Directive. The changes that have occurred were due to the socio-economic systems development. The impact of Habitats Directive on national environmental protection can be assessed as positive in terms of improving the legislative framework.

6 Cross-cutting analysis

6.1 The Habitats Directive transposition process and compliance types

The transposition of the Habitats Directive to domestic legal frameworks was slow in all the EU-15 member states (MS) and deadlines were initially missed by almost all MS (WWF 2001 and table 4). Realizing this, the Commission took steps to infringements procedures against several member states during the 1990s (Paavola et al 2009).Infringement takes place in a number of steps, of which the referral to the European Court of Justice (ECJ) is the final - a step signifying that severe implementation problems exist.

For the case countries, the three older MS were already members of the EEC at the time of adoption of the Habitats Directive (Denmark, the Netherlands, and Greece). They were delayed both in the legal transposition of the Directive, and in the designation of pSCIs. The ECJ initiated an infringement procedure against Greece in 1997 for non-compliance with transposing the directive correctly and completely in domestic law, ending with a conviction. The three governments all transposed the directive in 1998to domestic regulations, but in the following years the completeness of the transposition was challenges by domestic NGOs in both Denmark and the Netherlands, and also the Commission did not find that the transpositions were complete and correct. Hence, the countries have later adopted amendments or new laws to complete the transposition, Denmark and the Netherlands in 2003, and Greece in 2011.

Austria became a member state in 1995, and the Habitats Directivebecame effective immediately. The nature conservation belongs however to the jurisdiction of the Federal Provinces, and the transposition into legal frameworks followed different processes and methods, resulting in very different designations, in terms of shares of land area. The EC did not find the transposition satisfactory, though to a different extent for the different Provinces, and aninfringement procedure was also initiated and resulted in a conviction by the ECJ in 2007. Final adaptations in the Federal States took place in 2008. Romania took steps to transposition in 2004 during the pre-accession period. A large focus was at that time on harmonization of the composition and structure of the domestic regulatory system with that developed and applied in the EU territory, and organic integration of the EU directives and regulations was aimed at. The pre-accession period finalized with membership in 2007, in which year transposition of the Habitats Directive also took place through a Government Emergency Ordinance. Final transposition took place later through a Government Resolution in 2011.

In all the case-countries the transposition took place by adaptations and amendments to existing legal frameworks, while no specific Natura 2000 laws were established. The transposition processes are summarised in table 4.

The delivery of the first lists of proposed SCIs were delayed in Denmark and the Netherlands, and in 1998 and 2000 letters of notification was submitted to the two countries for insufficient lists of SCIs, resulting in updated lists to be approved by the EC in 2003. Also Greece and later Austria were delayed in the designations, and none of the countries complied with the 1995 deadline. The Greek list was finally adopted (though still with minor issues to be solved) in 2006, but 11 consecutive submissions took place between1999 and 2012. For Austria and Romania the lists where approved in 2008, but modifications are still needed in terms of additional SCIs or extensions to SCIs necessary to achieve sufficient coverage of habitats.

Table 4: Transposition deadline and compliance in the 5 countries

Processes	Formal deadline		DK	NL	AT	GR	RO
Transposition of laws, regulations, administrative provisions	1994 (Romania 2007)		1998	1998, 2002	1995, 2001, 2008 differs for provinces	1998, 2008, 2011 (additional 2002: provisions for MAs)	2001, 2007
Sites of community interest (SCIs)							
Proposed list of designations delivered to EU (pSCIs)	1995 (Romania 2007)		1998, 2003	1996, 1998, 2003	1996, 2001, 2008	1996, 1997, 1999-2012, until today 11 submissions	2007, 2011
Commission first approved list of terrestrial SCIs *)	1998 (Romania 2010)		2003	2003	2008 (2012 still several IN MOD)	2006	2011 (2012 still several IN MOD)
Numbers and areas of SCIs **)			234 (3432 km2)	140 (3239 km2)	170 (8992 km2)	241 (28075 km2)	382 (39979 km2)
Domestic legal adoption (SACs, 6 years after SCI adoption)	2004 (Romania 2016)		2003/2007 - all together	2012: 58 sites out of 141 approved by NL - one by one	159 (in 2010) - one by one	239 of 241 - all together	2007, 2011
Management (art 6) **Nature types:**							
Protection against deterioration or disturbance	1998		1998	2002	2001/2008	1998	2007
Assessment of implications of projects or plans	1998		1998, 2007	2002	2001, 2008	1998	2007
pro-active conservation measures (management plans)	6 years after SCI list		2003 law of env. Objectives. 2011 all management plans adopted	Target document 2008, 3 management plans adopted in 2012	Adoption of SACs includes management plans. 159 adopted in 2010	2 management plans adopted by June 2013	4 management plans adopted for SCIs by April 2013
Reporting - progress	6 years						
Summary - transposition complete?			Legal framework 1998, 2003, 2007	Legal framework 2002 SCIs to SACs not finalised	Legal framework 2001 and 2008, a few management plans/SACs missing	Legal framework 1998, 2008, 2011	2011 - SACs to be completed/adopted in 2016

*)IN MOD (Insufficient moderate): one or several additional SCIs (or extensions of sites) are required to achieve a sufficient coverage of the Natura 2000 network for this species/ habitat type
**) Adapted from Natura 2000 Newsletter 2012

Legislation to prevent deterioration in the N2000 areas where mostly provided/amended together with the designation of sites. It has, however been necessary for the EC to statute that the establishment of a legal framework is not sufficient, it also need to be effective. This was based on a ruling against Greece on the failing to establish and implement an effective system of strict protection for the sea turtle *Caretta caretta* on Zakinthos.

Transposition to SACs was the next difficult step, which should have been concluded in 2004, or 6 years after adoption of SCI list. This step initiates the pro-active conservation obligations, including establishment of conservation objectives and possibly management plans, which has led to objections by domestic stakeholders and lengthy processes in some countries. In Denmark the legal adoption happened already in 2003, when designations were all adopted in one legal text, and when the pro-active regulation was adopted by requirements to management and action plans in a separate law on Environmental Objectives.

The realization of the pro-active conservation through adoption of management plans however, did not take place until 2011 where all Natura 2000 plans were adopted by the Minister of the Environment. In the Netherlands and Austria the adoption of SACs and the approval of management plans are carried out one by one, and are not finalized yet. In Greece the legal framework for the management of N2000 areas were adopted, and a new law established the 'National System of Protected Areas' which also included the adoption of 239 SCIs (of241) as SACs. Romania, being later accessed to the European legislation, is required to adopt the SACs in 2016.

All countries opt for management plans, as the instrument for administration of the HD in the Natura 2000 areas, including the pro-active conservation. The status of the management plans differ widely, as seen in table 4.

All countries had nature conservation policies dating back to the first part of the 19th century, and during this century the concepts and principles behind nature conservation changed from a preoccupation with conservation of pristine nature to more integrated approaches, acknowledging the societal context and interaction with human activity. Changes to the original principle of conservation of pristine nature had thus to a large extent taken place before the implementation of the Habitats Directive, and were linked to a general change in the perception of nature conservation, characterizing international nature conservation communities, including the EU. The objective of the Habitats Directive is however to give precedence to ecological criteria and protection in Natura 2000 areas, while strong societal interests can overrule the conservation purpose in these sites - but not in the designation of sites. This has in some countries implied change to the management principles and approaches to nature and environmental management, e.g. in Denmark and especially in the Netherlands, where the spatial development plans formerly aimed at balancing different interests in the territorial functions, but are now overruled by the environmental objectives related to the Habitats Directive and the Water Framework Directive. In Romania the traditional conservation principle of pristine nature was challenged by the development in the beginning of the 1990s where principles of sustainable development called for a more balanced representation of interests.Experts and NGOs howeverto some extent adhered to the traditional approaches, while during the pre-accession phase influential stakeholders considered that any investments in biodiversity conservation and reduction of the environmental liability of the existing built infrastructure, would limit the macro-economic reform and economic growth, and this implied a lack of political will to push the issue of nature conservation to any important extent.

National priorities and international conventions had given rise to many types of designations for site protection during the preceding century - in some countries more than others. These might build on different classification systems and descriptive typologies. For several North-western European countries the CORINE habitat classification, applied by the EC in the Habitats Directive context, differed from what was formerly used in the countries, and created conceptual and practical barriers for the designation process.

While the countries all suffer from delays for the different steps in the transpositions, both the processes and the outcomes demonstrate different approaches. Comparing the compliance culture to the results by Falkner et al (2007, 2008) some similarities can be identified, but differences also appear.

6.1.1 Worlds of law observance
In the study of Falkner et al. (2007) Denmark belonged this category.

Based on the transposition history, it can be argued that there is evidence supporting this pattern also in the present analysis, but also contradictory aspects. Basically the table shows that Denmark had larger delays regarding all transposition deadlines. Looking more closely at the processes, it still appears that elements supporting a compliance culture can be detected. The lack of compliance to the first deadline in 1994 was due to the newly adopted Law on Nature Conservation from 1992, followed by an executive order from 1994 adopting management and protection regulation of the Natura 2000 areas. Infringement procedureshave been initiated several times, while not resulting in convictions, as the Danish administration had already prepared - or swiftly initiated - compliance measures. This was however also due to a domestic pressure raised by an active NGO-scientific expert alliance. Delays had different explanations - both regarding time consuming consultation phases on the designations and the later plans, but also on domestic interest constellations which favoured water policieson the environmental policy agenda, making little space for biodiversity policies. It can be argued that the latter was more a question of favouring one EC policy for the other (the Nitrate Directive and the WFD rather than the HD), and that this was both due to Farmer Association interests, but also that the WFD operates with stronger deadlines than the HD.

In spite of delays, the transposition ended up as being complete in the sense, that all articles were implemented in existing laws and executive orders, accomplishing the rather complex task to include in all relevant sector regulation the necessary impact assessment procedures and permit regulations, as well as making the regulatory framework coherent. According to respondents in the Nature Agency, there is a general will to comply with EU directives, and the Directive instruments get a high priority.

In general the process reflects a compliance culture, which Sverdrup identifies as a distinct Nordic exceptionalism in the implementation of legislation (Sverdrup 2004), also described by Etherington (2006:109) as a general compliance pattern, but elements of the 'Worlds of domestic policy' culture is also identified, in terms of the role of domestic political players - firstly the environmental interest organisations in the transposition phase, and next in the long standstill from the adoption of Law of Environmental Objectives in 2003 (providing for the Natura 2000 plans) and the actual adoption of the plans in 2011, two years late of the deadline. This delay is explained by respondents as the aim to conduct parallel processes of implementing Nature 2000 planning and River Basin Management Planning according to the Water Framework Directive - the latter being a highly politicised and delayed process.

6.1.2 Worlds of domestic policies
Falkner et al. (2007) positioned the Netherlands and Austria in this category.

Like Denmark, long delays characterised the Dutch transposition, and the timing of the transposition process was close to similar. However, the domestic processes are somewhat different even if there are also similarities. The importance of the biodiversity agenda has been different, the contradictory interests seem to play more prominent roles in the Netherlands in relation to the farmers and the water managers, and the financial implications are potentially huge due to the special situation regarding the management of water and to role of Water Boards in the Dutch society. This explains the few management plans adopted at present, and supports the location of the Netherlands in the category of domestic politics.

Biodiversity had been an important policy area for a longer period before the HD, and it was perceived by the Dutch administration that the HD was framed according to Dutch experiences and that change to domestic legislation was therefore considered unnecessary. The same conception had characterized the

approach to the Birds Directive, for which the delays had been even longer, and for which a conviction by the ECJ for non-compliance took place in 1996.There was a strong lack of will with policy makers to change the domestic conservation framework, which implied that whenthe designations appeared to be necessary, as demonstrated by the conviction by the ECJ, the process was hurried, prompting serious domestic opposition, due to the large information and communication gap. The resulting policy became too complex and arguably also too restrictive, and a revision of the Nature Conservation Act and the Flora and Fauna Act is now foreseen. The policy broke with the existing nature conservation discourse of balancing stakeholder interests, and thisled to a strong hostility towards the later implementation.The importance of domestic interest constellations are observed in the many court cases related to designations, and later inthe process of translating SCIs into SACs, which has been slow and highly conflict-laden, with only a few finalised.

While Austria was obliged to transpose the directive shortly after accession, delays in transposition were large.The important aspect in Austria was the lack of a unified approach, targets and guidelines, due to the multilevel governance framework in Austria, where nature conservation as a policy areasolely under the jurisdiction of the Federal States (Provinces). Thisimplied nine partly very different ways to transposethe HD into provincial laws, and also here a conviction by the ECJ was necessary to push transposition.Provinces respond very differently to the EU requirements, and as a result, very different shares of land areas have been designated in these. This has prompted the creation of a national Committee to further the dialogue between EU and the Provinces. Nature conservation policies in Austria are highly defensive, and hold a low priority on the policy agenda in comparison to agriculture, with lack of political will to push for active conservation, and very low domestic allocation on funds. Due to the institutional set-up, this differs among the Provinces, and a smoother designation process has been observed in provinces with a broader involvement than in Provinces running a more centralistic process.The legal adoption as SACs are taking place one by one following the production of management plans, but this process seems to near the finalisation.Due to the strong regionalist governance structure and the low priority to the Natura 2000 areas, there are some indications to support the location of Austria in the World of Domestic Policies, while we have too little information on the completeness and the correctness of the transposition to make strong conclusions on this.

6.1.3   Worlds of transposition neglect
Greece was identified as a compliance-neglectingcountry in the Falkner study.

The transposition historyin relation to the Habitats Directive tend to support this categorisation due to the delays in transposing the full prescriptions and due to the lack of effectiveness in later implementation and enforcement, as documented by many individual cases raised at the ECJ. Explanations for delays are found both in relation to the legal set-up underpinning the transposition (being challenged in court), lack of establishment of a coherent legal framework (large number of laws, numerous overlaps in jurisdictions, weak coordination with other sectorial policies) and in conflict of interests in Natura 2000 areas. But even larger problems seem to ravage the administrative implementation, where the Management Authorities are not established for many protected areas, and when established, are not viable, lack human and financial resources, as well as jurisdiction. Conversely, the legislation at the local level is claimed missing, and based on the unclear law complex, institutional reform is called for by respondents. The delimitation of SCIs has stirred opposition and court cases have been conducted, even if the areas are to a large extent overlapping designations existing before the Habitats Directive.There are conflicting interests in the Natura 2000 areas, with no strong support for adherence to the protective regime, even if respondents think that

the implementation of the HD has strengthened the nature protection to some extent. Also, the economic crisis has spurred a recent structural reform, which has also touched the MAs, reducing their numbers, and merging or abolishing some.Based on this assessment of delayed, incorrect and incomplete transposition, with insufficient and incoherent follow up in implementation and enforcement, there is evidence that the handling of the Habitats Directive would alsoput Greece to the non-compliant category.

6.1.4 Worlds of dead letter?

The situation in Romania is special in relation to this study, as the country became a member state to the EU only in 2006, and all original deadlines did not apply to this country. It is also special however, in the sense that the domestic legal framework had to adapt to EU legislative requirements during the pre-accession phase, as a part of the accession process. Hence, the implementation of the Habitats Directive was seen as an obligation- perceived as a push more than a priority by some respondents. The minor delays to full transposition were related to the complexity of the (pre-) accession process, and the low priority of nature conservation in this. A process of identification, consultation and designation concluded in adoption of the SCI listsby the EC in 2007, however with still insufficient coverage, which had to be supplemented until 2011.The emphasis on the compliance to immediate legal requirements resulted in a law, which at the regional level suffer from problems with clarity and sufficiency and where missing coordination between sectorial ministries result in an unclear administrative basis. This also includes a lack of clarity on the administrative distinction between the N2000 sites and the national - sometimes spatially overlapping - types of protection.Hence, while no larger delays have yet taken place, it is doubtful if the outcome is sufficient for enforcement.The general lack of priority to the nature conservations issue, as documented in development strategies, indicate that Romania would not be found in the law observant compliance category, while the Dead Letter category, to which it was allocated in the study of Falkner, seems not fully appropriate, given the process following the accession, the designations and the legal amendments. Due to the difficult economic situation in the country, tendencies to lend priority to domestic (economic) polices or maybe even neglect, could be argued, due to the lack of progress in management plans, the infringement cases raised by the EC on lack of enforcement of the defensive protection regime. On the other hand, Romania has enacted specific rules to guarantee the coherence of other plans and programmes (especially land-use plans) with the management plan of Natura 2000 sites, hence ensuring a larger coherence in the governance framework that e.g. Greece. Conclusions of this will need to await the results of the management planning ahead. Resources for management planning are allocated in subsidy schemes for the coming years, but deadline for management plans approaches.

6.2 Designations and the management challenge

As we saw above, the type of Europeanization process enforced by the Habitats Directive rests on a regulatory approach to nature conservation, while the main funding mechanism lies with the Common Agricultural Policy, which for its EAFRD axis2 program is based on farmers' voluntaryparticipation, facilitated through the subsidies, according to the schemes domestically selected and designed. In this section we will address the changes to institutional frameworks that the habitats Directive might have spurred, in terms of adaptations to governance structures: roles and responsibilities, and to the instruments formerly used in nature conservation.

Firstly, the challenges met by authorities differ in terms of the overall character of the Natura 2000 areas, which again may have implications for the need to adapt the former governance structures.

In table5 the average size of Natura 2000 areas has been calculated from the information on total areas and numbers of sites. Even if thiscovers a large variation in types and sizes of habitats within each country, it still provides an indication of the variation in the management challenge of the areas, and maybe seen as part of the background to understand differences in the governance frameworks designed for the management.

Table5: Size of the total terrestrial area of SCIs in 2012, the numbers and the average sizes

	% land area covered SCI+SPA	SCI terrestrial area km2	SCI terrestrial N	Average size SCIs km2
Denmark	8.94%	3433	234	15
The Netherlands	13.82%	3240	140	23
Austria	14.96%	8992	170	53
Greece	27.30%	21623	240	90
Romania	22.66%	39979	382	105

(Source: Natura 2000 Newsletter January 2013,
http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000newsl/nat33_en.pdf

Many types of national and international protections existed before the adoption of the Habitats Directive, Natural Parks, Nature Reserve areas, Wildlife refuges, with different strengths of conservation. The concept of larger nature reserves and natural parks - also related to international agreements - have been embraced by Romania, Greece, Austria and the Netherlands, while Denmark - apart from the RAMSAR areas - has mainly used the instrument of nationally strongly protected areas, combined with a general less strong protection of natural habitats consisting of often very small and fragmented areas in the agricultural matrix. Natura 2000 designations typically have large overlaps with these areas, and in some of the countries several Natura 2000 areas may be found within the same area protected for other reasons.This raises issues of definition of protection criteria in overlapping areas.

No recent assessment of the share of agricultural land in the Natura 2000 areas have been found, but an assessment from 2004 of the share of intensive and extensively cultivated farmland in the proposed sites of Community interest (pSCIs) is presented in figure 3, where Denmark stands out with larger areas of intensive agriculture in the Natura 2000 areas, followed by Greece.

Figure 3: Share of intensively and extensively cultivated farmland in Natura 2000 sites in 2004 (Source: EEA/ETC, page 42)
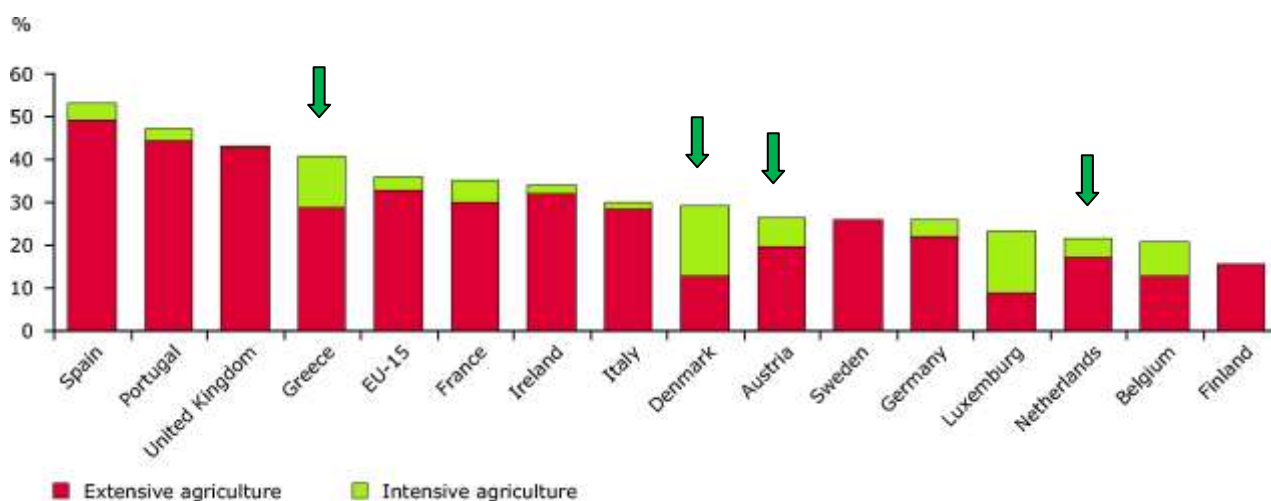
Analysis of the land use in Natura 2000 from 2006 based on CORINE LULC data (figure4) makes possible to include also Romania, and also to get an idea of the forest share. Even if not up-to-date, the two figures provide an indication of the management challenges presented to the different countries for agricultural and non-agricultural habitats respectively, as well as the share of forest habitats.

Figure 4 Land use in Natura 2000 in 2006 (M-L Paracchini, pers. com 2013)
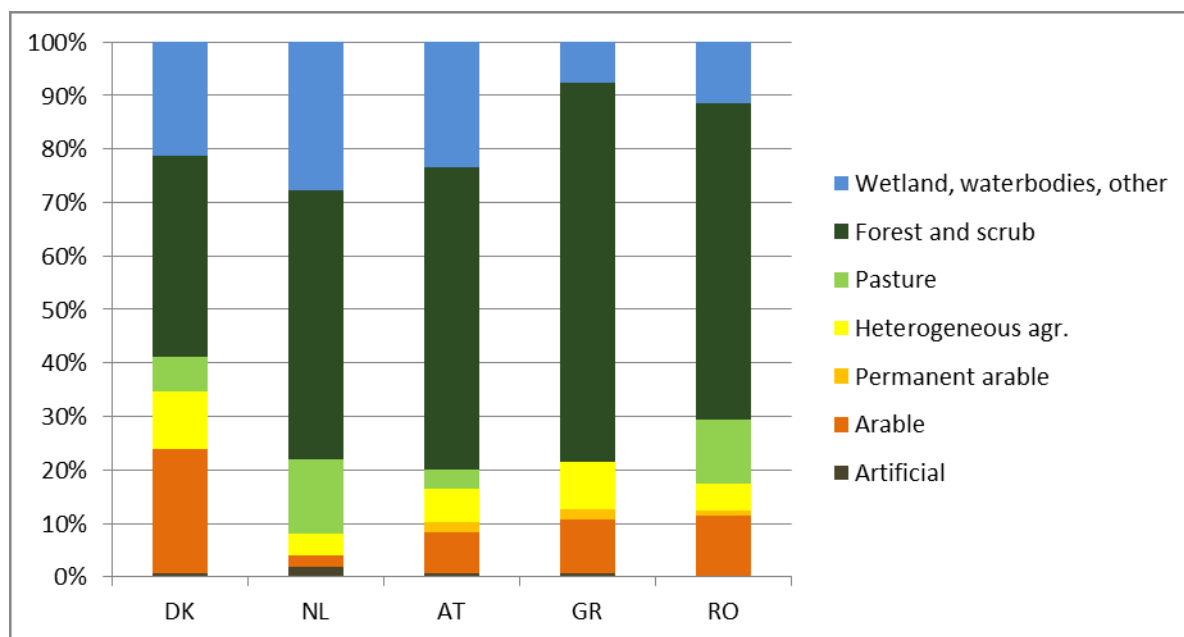
The two smaller countries (Denmark and the Netherlands) in which agriculture covers a dominant share of the countries' total land areas, have selected quite different approaches to domestic nature conservation, and later implementation of the Natura 2000 network. In the Netherlands, in which biodiversity protection has been prioritised during a longer time period, larger shares of the land territory has been designated than in Denmark, and it has been sought to segregate agriculture from nature conservation as far as possible through the EHS network, which became thebasis for the Natura 2000 designations. This results in a Natura 2000 network in which intensive and heterogeneous agricultural land use is very low, while pastures compose a large share of the Natura network.On the contrary, the Danish Natura 2000 network includes large areas of intensively cultivated farmland, as it is designated to include the protected -often small - areas of habitat types,which were also to a considerable extent part of the agricultural matrix.Arable land use also takes up a considerable share of the Romanian Natura 200 sites, including larger areas of pasture, while the Austrian and Greek farmland shares are approximately the same, with little or no pastures. The Netherlands, Austria and Greece have similar shares of agricultural land, while the part of composed by pasture differs significantly. This has of course implications for the management of the areas, and the importance of the agricultural subsidies and their design. Another important aspect is the large shares of forest, as the management regimes of forests and Natura 2000 in some countries are not well aligned, as documented in the Greek and Romania reports.

The designation strategies related to Natura 2000 area sizes have also been different - in Romania and Greece the Natura 2000 sites are large - both in terms of share of the national territory, and in terms of

average sizes. This implies that the areas sometimes include villages, excavation sites, summer cottage areas and farmland habitats, spurring conflicts related to developments in settlement and other use.

6.3 Adaptations in governance structures

The administrative levels and responsibilities for the implementation of the Article 6.4 are shown in table 6. The table illustrates that although all countries opt for producing management plans, the administrative set-up for the implementation of these are different. Usually the Ministry of Environment is ultimately responsible to the Commission for designations, monitoring and reporting, while producing management plans and implementing these in practise are carried out at various levels and by various actors. Some countries solely rely on the public authorities for the different procedures and tasks, some involve NGOs and even private business partners in the tasks concerning the production of management plans and later the concrete management of the sites.

Table 6: Roles and responsibilities for Natura 2000 implementation tasks

Roles	DK	NL	AT	GR	RO
Responsible for Natura 2000 designations	Government (Ministry of the Environment)	Government (Ministry of Agriculture, Nature and Food Quality)	Provincial Government	Government (Minister of the Environment, Energy and Climate)	Government (Ministry of the Environment)
Approval of Natura 2000 management plans (MPs)	Government (Ministry of the Environment)	Government (Ministry of Economic Affairs, Agriculture and Innovation), and the provinces	Provincial Government	Government (Ministry of Environment, Energy and Climate Change)	Government (Ministry of the Environment)
Responsible for MPs	Government (Ministry of the Environment)	Different ministries and Provinces.	Provincial governments (Department for Nature Conservation)	Management Body (with stakeholder advisory board)	Legally bound administrators or custodians
Producing MPs	Ministry of the Environment (Nature Agency)	Provincial executives, Ministers: ANF, Public works and Water Management, Defense	Mostly Nature conservation agencies	Management Body (with stakeholder advisory board)	Legally bound administrators or custodians
Implementing MPs	Municipalities: through action plans following MPs. Nature Agency, Ministry of Defense when land owners	Mainly land owners: NGOs (Mainly Natuurmomenten), State Forest department, other	Regional coordinators , appointed for each N2000 area	Management Authority (potential overlaps to regulations for other policy areas)	Legally bound administrators or custodians. If the site does not have this or if the elaboration of the management plan is funded by national and European projects, the management plan can be produced by other entities (consulting firms or other commercial companies, universities, NGOs etc.)

Even if protected areas formerly existed in all countries different types of adaptations to the governance structures took place following the transposition.

In the Danish model for administrative implementation roles and responsibilities are well-defined and the structure and responsibilities have not changed due to the Habitats Directive. They did change, however, in 2007 when counties were abolished in a structural reform, and municipalities were merged to larger units.The newdistribution of tasks to state and municipalities had various implications for delays in the Natura 2000 planning. A strong centralisation of environmental management became the result of the reform, as both the Natura 2000 plans and the River Basin Management plans according to the WFD, as well as monitoring programs were referred to the national level (Nature Agency), while municipalities are obliged to produce action plans enforcing these plans at the municipal level. Little man power in this policy area resulted however from the structural reform in some smaller municipalities, who decided to outsource - part of - the action plan to consultancies. Also, specific expertise could be in demand, and coordination forums were created horizontally, for knowledge transfer and learning among municipalities. While horizontal coordination at municipal level seem to be successful, the vertical coordination between state

and municipalities has been criticised for missing coordination and overlapping planning framework, and discussions of how to improve the planning process is on-going.

In the Netherlands a target document was produced in 2006, which became an important document for guiding the designations and the production of management plans. A multi-level administrative structure was chosen - a common model for environmental policies in the Netherlands, while in recent years decentralisation has provided the Provinces withincreasing responsibility. Various types of national and vertical coordination platforms have since been created to solve upcoming problemsin coordination, implementation and integration. The Natura 2000 sites are placed within the former Ecological Main Structure network, and the share of farmland is deliberatively small, as shown above. The NGOs had formerly acquired a role asboth owners and managers of a major share of these areas, and thismanagement structure continued when the Ecological Main Structure approach was more and more taken over by the Natura 2000 focus. Hence, a polycentric public-private management structure was up-kept, and management plans are mainly produced and enforced by land owners such as NGOs, Provinces and the State Forest Department.

In Austria some of the provinces have developed standards for management plans, but without national guidelines for targets, management and implementation. This is due to the AustrianProvinces being in sole charge of the nature conservation.This has resulted in considerable variation among the Provinces, and has also resulted in some problems in the implementation. E.g. a committee for facilitating the dialogue between EU and the Provinces has been created. Regional coordinators areappointed for communication and control of Natura 2000 areas. This task is mostlywith the National Park manager if the site is located in a National Park or other protected area - which is predominantly the case - while the regional authorities take on the role as coordinators if no former designation exists for a Natura 2000site. Assessment of implications and notification of changes to management is controlled at the municipal level, and basically the administrative structure is multi-level, as has been the case for other protected areas. It is however, only the designations that concerns nature conservation, which are the responsibility of the Provinces, and this spurs a coordination need, when other types of designations are under the management of the national authorities.

In Greece, the responsibility for planning, management, monitoring and research of the protected areas hasprompted the legal adoption of provisions for Management Authorities. Apparently it was instigated by the need to take steps from protection to proactive management, and25Management Authoritieswere created in 2002, however without sufficient jurisdiction.They consist of an advisory board of representatives of central and local administration, local stakeholders, NGOs and scientists. They are supposed to get scientific, technical and administrative support, but only four of them have obtained official responsibilityaccording to a Ministerial Decision. This implies that the regulation of activities such as hunting, fishing, logging etc., which are with the Forest District Offices under the Ministry of Agriculture, may create conflicts at the management level. In general responsibilities are not well-defined and commonly known, and those bodies designed to facilitate the Natura 2000 implementation are not functioning according to their purpose. According to respondents a general lack of coordination and problem-solving persist. Hence, the governance structure has a polycentric character, and in some Natura 2000 areas, management authorities and Forest District offices may have conflicting interests.

During the pre-accession phase, Romania had a focus on adapting existing composition and institutional structures to the EU regulatory framework, and the formal structure for Natura 2000 is in place. The

responsibility for the Natura 2000 network and its operation is with the National Environmental Protection Agency, as well as its regional and county level bodies. For the management of the areas, administrators or custodians are appointed according to the type of area - administrators are in areas where other protections require an administrative structure, including advisory boards and scientific council attention, while the custodians are for single Natura 2000 areas without stronger domestic protections. Custodians can be public entities, NGOs or private business associations.Less emphasis was given in the pre-accession phase to thedevelopment and improvement of the organizational and institutional capacity to effectively use the rules, mechanisms and standards in the implementation. This implies missing appointments of custodians, lack of management plans andinappropriate organization of the public consultation, leading to opposition and lack of trust in the Natura 2000 network. Moreover, lack of expertise and professionalism is a persistent problem.

In table 7 the type of implementation structure for the N2000 management is illustrated, and it is indicated where new administrative units or structures have been implemented, as a response to the Habitats Directive or with implications for this.

Table 7: Type of administrative set-up and changes following the N2000 planning and management

Administrative set-up	DK	NL	AT	GR	RO
Designations and approval of management plans	Centralised	Centralised	Centralised at level of Province	Centralised	Centralised
Responsible for Natura 2000 management plans	Centralised	Multi-level	Centralised at level of Province	Centralised	De-centralised
Producing Natura 2000 management plans	Centralised	Multi-level/PP	Centralised at level of Province	De-centralised polycentric	Multi-level/PP
Application and enforcement of plans *)	De-centralised	Multi-level/PP	De-centralised	De-centralised	Multi-level/PP
Governance model	Multi-level	Multi-level/PP	Multi-level	Polycentric but overlaps/PP	Multi-level/PP
Stable (O) / changing (X) units/structures	(X)	O	(O)	X	(O)
	Stable, but considerable change due to structural reform	Same units but increasing responsibility to provinces	Regional coordinators existed before, for N2000 however under Provincial autority	Management Authorities decided in Spatial law (1999), structural reform 2010, 2013	Stable, but minor change due to structural reform

*) in the sense of the management tasks for realising the Natura 2000 plans, e.g. producing sub-plans, contacting farmers	
Centralised	National level decision-making
De-centralised	Main decision-making responsibility at provincial/regional/local level
Multi-level	Decision-making responsibility at several vertical levels in public administration,
Polycentric	For one Natura 2000 site several authorities can be involved in decision-making at same administrative (horisontal) level, overlaps signify overlapping and unclarified responsibilities
Public-private (PP)	NGOs or private entities sometimes in charge of managing a Natura 2000 area

Based on the variations in the type of Natura 2000 sites (from small areas in the agricultural matrix to huge mountainous or delta nature reserves), different administrative structures have been designed. This was, however, also the situation before the Habitats Directive implementation.There are obvious differences in

management requirements for smaller and larger areas, for Natura 2000 areas that overlap with other, sometimes stronger protected areas, and for areas with larger shares of farmland, or other socio-economic interests, and associated conflict potentials. The countries with existing frameworks for protected areas have mainly opted for the use and adaptations to these, either by enrolling the Natura 2000 management in existing Management Bodies or by appointing special responsible coordinators/management bodiesalso for N2000 areas (AT, RO, GR), while others mainly rely on the general administrative structure (DK, NL). Moreover, in Romania and Greece the responsibility for the management and enforcement is sometimes outsourced to other public or private bodies like NGOs, universities and business societies, while in the Netherlands, the tradition of a multi-level, multi-actor governance approach is applied also towards the Natura 2000, with shared responsibility between vertical levels of authority, and with NGOs as owners and managers of half of the Natura 2000 areas.

While the solution with a specific management body for each Natura 2000 area can be advantageous for the large Natura 2000 areas, as it enforces attention to the criteria and the rules for management, it is obvious from the study that it creates a specific coordination effort in terms of other legal provisions, and availability of both expertise and legal support has been problems. Keeping the overall management and enforcement in the general administrative framework can be advantageous as the coordination may then mainly happen in-house (as in Denmark), but this rests on the relatively small areas involved and may still be hampered by lack of human resources.

6.4 Instruments and measures selected, and funding mechanisms

Instruments to be applied in the designated areas are firstly related to the protection of the sites from deterioration, already to be implemented from the SCI list adoption by EU, and within 6 year after SACs are legally adopted, pro-active management is required.

This implies that sector activities are regulated in the Natura 2000 areas, either by prohibition of certain activities or the application of impact assessments of projects. Environmental impact assessments of larger projects and plans have been a common procedure in the countries for many years, and would now need to be extended to the Natura 2000 areas. The procedure is under the Habitats Directive mandatory from the day that EU has adopted the SCI lists. This requires however that the authorities are noticed of projects and plans before they are realized and that they do apply the method effectively. Problems related to the enforcement of this rule have been documented for Greece (European Commission 2006) and Romania (European Parliament 2009).

The major issue in the countries is that pro-active nature conservation is an obligation within the Natura 2000 areas, implying that plans for this should be in place when SACs are adopted. This has for all the involved countries implied that management plans have become mandatory, but some countries adopt the SACs without management plans yet produced. This was the case in Denmark, where early adoption of designations took place while plans were delayed,and is now the case for Greece, where adoption has mainly been due to the EU deadline being passed.The pro-active approach breaks with the usual defensive management tradition in which prevention of deterioration has applied.

The majority of funding for the implementation of the Habitats Directive is derived from the EU for all countries. The main funding source is the European Agricultural Fund for Rural Development (EAFRD), and the schemes related tosupport for mountain regions and other disadvantaged areas, for agri-environmental

or forest-environmental payments, and for non-productive investments for agri (or forest)-environmental purposes. These schemes have increasingly been directed towards Natura 2000 areas.

Another important EU funding source is the EU-LIFE funds, which are dedicated environmental policy implementation, including specifically the implementation of Natura 2000.These funds are given to projects, and are also used by all countries, but they are often minor contributions, compared to the Rural Development schemes.

The extent to which national funding is allocated to Natura 2000 differs. The national funding is negligible in Greece, and for Romania 10 % domestic supplement to the EAFRD funding is planned for, but the release of these subsidies is delayed due to lack of management plans. In the Netherlands, Denmark and Austria domestic resources are available at national and regional level, for nature management and specifically for Natura 2000 implementation even if it is a minor source in relation to the EAFRD funding.

Funding for the administrative effort and for the concrete tasks to be carried out by authorities, farmers, foresters and other stakeholders are in general a major problem that derives from too little domestic funds available, lack of expertise to attract the funding, lack of awareness of subsidies, lack of management plans as a pre-requisite for attracting funds from the Natura 2000 scheme, and inadequate schemes and measures.

The countries are at a very different stage in terms of planning the effort for maintaining or restoring habitats to a favorable status, and it is only Denmark which has all management plans adopted, and next steps taken. This does not imply that nothing happens in other Natura 2000 sites. Because many sites overlap with former designations, management of these sites may take place anyway. This has, however, not been investigated in the present research. But according to the interviews made, thereare serious problems with the alignment of the management effort and the funds available, and in all countries the majority of fundingis derived from the EU.

6.5 Policy integration

Policy integration is an extremely important issue for the management of Natura 2000 sites of various reasons, including the funding structure.Also, in some countries expectations to integration between the Habitats Directive and the Water Framework Directive have been high, and the success of this integration is crucial in some countries, e.g. in the Netherlands, where maintenance of some habitats depends on the level of the water table. This integration is an extremely sensitive issue, with potentially large economic repercussions, due to the farmers' dependency on the water table. Efforts towards integration have in general been insufficient. Some Water Framework Directive measures may also be a threat to valuable habitats, if not coordinated (e.g. location of wetlands).

An important aspect of policy integration is the often overlapping rules and responsibilities between the Natura 2000 policy area and the forestry policy area. In some countries -evidence has been raised from Greece and Romania - alignment of the two governance frameworks has not taken place, and the management authorities of Natura 2000 areas do not have sufficient legal back-up to enforce legislation (Greece).

Several respondents have made the point that a system where nature conservation is funded by agricultural funds is not very efficient, as it is often governed through the Ministry of Agriculture, in which an overriding objective is to secure farmer incomes. The implication of this is that nature conservation gets

lower priority. Another aspect raised by the Danish respondents was that of the voluntariness of the measures, which was seen as a favourable condition, as farmers need to be motivated for real changes to take place, while it also creates challenges, as it may imply extensification of less optimal areas when farmers does not want to make an agreement for the areas that hold the most important nature values. The crucial aspect raised was the (lack of) sufficient resources for facilitating the dialogue with farmers.

In Denmark it also showed up in interviews that linkages between the single payment and the subsidies for agri-environmental appointments were highly controversial, as some cases of very strict control of the conditions in the agreements had led to huge losses of both the AE subsidies and the single payment, due to minor violations (according to municipal respondents and consultant in agricultural association). This created great fear for these appointments, even if it mayin reality be a myth based on few cases.

More flexibility in the implementation of the AE schemes was also an issue raised - Danish municipal respondents asked for a system where basic subsidies could be supplemented by subsidies linked to additional specific management tasks - and for the possibility to a one-time compensation rather than contracts that should be renewed, with consequences for administrative resource use as well as potential threat for the areas being re-cultivated.

6.6   Misfits and perceptions of barriers to implementation

Table 8 summarizes the apparent misfits in the instruments imposed by the Habitats Directive, and the existing domestic governance frameworks for nature conservation. In most countries changes to the regulatory structure as a result of the Habitats Directive implementation were small - either because the management set-up for existing protected areas was just extended to the Natura 2000 areas or a similar management body/custody was attached to the sites, such as in Romania and Austria, or due to an implementation in the existing administrative system and levels as in the Netherlands and Denmark.A new structure of management authorities was selected in Greece, however without assigning the appropriate legal force. The process coincided in Denmark with a general administrative structural reform, which re-distributed nature conservation responsibilities and delayed the process of administrative implementation, while in Romania the administrative structure was also in transition due to the accession to the EU, posing special challenges.

The conservation and management paradigm, which imposed a relatively strict protection, implied changes to the existing paradigms for several countries, but in opposing ways. In Denmark and the Netherlands the overriding priority given to the Natura 2000 area protection, and the quality objectives attached to this were new, and implied changes to the planning frameworks, while in Romania, contradictions appeared in the designation phase, where traditional conservationists did not adhere to the collaborative approach, and the need to involve stakeholders to the areas.

In most countries, several different types of nationally and internationally protected areas with different strength of protection existed beforehand, and in this way, the instrument of area delimitation and designation was not completely new. However, the requirements of delimitation solely based on scientific criteria implied that the (lack of) scientific knowledge needed for designation was a challenge for all countries. In addition, lack of knowledge defining objectives was also evident for some countries.

As management plans were also a well-known instrument for the management bodies attached to larger protected areas, impact assessments following the Strategic Environmental Directive was also known in some countries.

As is evident from section 6.1 and table 8the misfits in governance frameworks does not seem to be the main barriers to overcome in relation to the transposition and the implementation of the HD, as most instruments were well-know and governance structures were mostly in place.

Table 8 Main misfits regarding the institutional framework (structure and style) promoted by the Habitas Directive, and the existing domestic institutional frameworks used in nature conservation

Misfits (HD requirements and need for domestic changes/adaptations)	DK	NL	AT	GR	RO
Conservation and management paradigm	x	x		x	x
Regulatory structure (vertical distribution of roles and responsibilities or horisontal concentrated or distributed authority)	x *)			x	
Instruments (changes to regulatory style)					
Designations as instrument in nature conservation					
Impact assessments for nature conservation areas					
Restoration to favourable status (pro-active conservation)	x	x	x	x	x

*) Tasks were redistributed as consequence of structural reform

However, both the document analysis and the interviews revealed interesting information on the perceptions of the barriers that had delayed transposition and proper implementing of the Habitats Directive and the Natura 2000 plans.

Respondents were asked which barriers they saw for implementation. In table 9 the categories of barriers mentioned by the respondents are presented with indications of the country to which respondents belonged. Barriers not mentioned may of course still be relevant, and the few barriers mentioned from the Austrian case, is likely related to the few respondents (mainly experts) that had participated in the interviews, as well as to the less depth in the document analysis.

The colors indicate different types of barriers that were mentioned. This include following categories

- Legal framework is not adequately completed
- The administrative implementation is unclear and un-aligned to other policies
- There is a lack of expertise and/or awareness and professionalism among management bodies - especially at local levels, but lack of commitment also existed at higher levels
- The communication and involvement of the public and local stakeholders in transposition and designations have not been sufficient, and communication to farmers of regulation and possibilities have also been insufficient
- Inadequate instruments and measures for management
- Larger conflicts of interest in the Natura 2000 areas
- Policy integration and coordination of policies and policy instruments is insufficient
- Domestic funding for Natura 2000 is low and sometimes almost non-existent

Table 9: Barriers to implementation mentioned in country reports

Perceived barriers to domestic implementation	DK	NL	AT	GR	RO
inadequate legal basis and overregulation		x		x	x
Overlapping legal frameworks (sectoral) and unclear jurisdictions				x	x
Unclarity of rules and their impliations		x		x	x
Lack of clear administrative organisation of tasks and coordination	x			x	x
Unclear common procedures and criteria				x	
Lack of compliance to rules concerning e.g. impact assessment				x	
Delay in management plans and ensuing lack of funding options					x
Lack of staff to overcome the tasks					x
Lack of awareness or professionalism in regional/local administrations		x			x
Insufficient commitment		x	(x)	x	x
Poor institutional capacity for accessing EU funding					x
Lack of involvement in transposition and designation phase		x	(x)		x
Lack of involvement in the planning phase	x				
Lack of information of N2000 to farmers and other actors	x		x		x
Negative framing and lack of public trust in the Natura 2000 network		x			x
Lack , or inadequacy of measures:	x	x			
Rural Development Program schemes	x	x			
Other measures	x				
Delays in compensatory measures due to delay in management plans					x
Conflict between agriculture (land owners) and nature conservation	(x)	x	x		x
Larger conflicts of interest in Natura 2000 areas		x		x	x
Limited policy integration/coordination to other sectors	x	x	x	x	x
Insufficient domestic funding for Natura 2000 implementation	x	x	x	x	x

Looking at the list of categories it supports the impression that the barriers perceived in some countries (Greece and Romania)relate to a persistent lack of a clear policy framework, where sectorial policies have been aligned to the rules and regulations that apply to the Natura 2000 areas, and where those rules are also consistent with the rules for other designations in case of spatial overlaps. In the case of Greece it adds to the general picture of a country for which compliance to this policy is not a priority, while this is difficult to conclude for Romania, where the processes have not had such along span of years to work, and in which the complicated alignments to EU policy is still in process.

In countries where the legal framework is completed, the emphasis is more on the procedural problems and conflicts that have complicated the implementation severely and maybe still do, such as lack of sufficient involvement of those concerned with Natura 2000 and those landowners whose activities may be affected by the designations. Moreover the adequacy of the instruments and measures available is also a matter of concern, especially in those countries where application and enforcement is ongoing. These experiences are however not confined to the Natura 2000 management effort as rural development schemes has long been a tool for agri-environmental measures in general. Detailed assessments of problems met in the implementation of the relevant measures under EAFRD has revealed many types of problems both related to the adequacy of the schemes and the causes of non-uptake (e.g. examples from Greece, IEEP 2011). Hence, the barriers are to some extent related to institutional aspects of the implementation, but also, and maybe increasingly, to both the procedural and the substance of the issues, such as where the most important habitats are located, and how the individual stakeholders are persuaded to be involved. The dominant issue of financing the efforts also rests on the complexity of EU-LIFE funding and the expertise and human resources needed to apply for this funding.

7   Discussion

It has been a lengthy and technically difficult process to create the Natura 2000 network and the original deadlines given by the Directive has been far exceeded. However, the countries involved in this study have responded in different ways to the transposition process, allowing a discussion of the suitability of the typology of Falkner et al. to this policy area.

The transposition included both the transposition of the objectives into domestic legal texts, but also a delimitation of Natura 2000 sites and an approvement, which would initiate the pro-active conservation obligations. Different problems were found in this process, e.g. the adoption of an almost literal translation of the directive into domestic legal texts in the countries, but without a follow up to sufficiently align it with other policy areas (such as forestry, RO and GR), which have complicated later implementation. Moreover, the complexity of the legislation, e.g. in terms of how to delimitate the areas without sufficient knowledge of the location and extent of different habitat and species types have caused delays, or how to properly implement the pro-active management framework (GR) or implementation (RO). Moreover, how to implement the assessment of implications in a way that functioned also for species 'in their natural range' have implied later amendments (DK). Domestic opposition have in some countries made the adoption of management plans a lengthy process (NL, AT) while in other countries the Habitats Directive have been regarded by green organizations as a lever to raise the nature protection on the national policy agenda (DK, but also NL). In some countries the socio-economic agendas have been overriding, leading to a political neglect of the nature protection issue (GR) or a downplaying in development strategies (RO), while in general the lack of ultimate deadlines for real outcomes in terms of obtaining a favorable conservation status of the Natura 2000 habitats and species may also have contributed to the lengthy transposition processes (e.g. in comparison with the WFD, DK). Lack of allocation of unique responsibility for each activity in the implementation process causes unclear responsibilities and overlaps in jurisdictions, and conflicts of interests may play out on this arena. Special consideration need to be given to the relationship between authorities for nature conservation, agriculture and forestry, at all levels. This critical issue is supported by several other studies (Apostopoulou & Pantis, 2009, Court of Audits of France, 2008)

Compliance to the EU Habitats Directive was analyzed in terms of the timely transposition and the correctness and completeness of the legal frameworks. From the analysis it could be concluded that none of the countries transposed in a timely manner, but that there were considerable differences both in the correctness and the completeness of the transposition. It could be asked to which extent complete timeliness could be expected, given the complexity of the directive, which has also been realized by the EC, still issuing various guidelines related to specific procedural steps, such as the transposition to SACs (EC 2012). Recent research on the implementation of the Water Framework Directive (Liefferink et al 2011)has highlighted that a centralistic driven adherence to substantial targets and deadlines may at the outset seem to provide better results than bottom-up processes with long delays, but that this may in the long run back-fire in the implementation and enforcement process. This could partly excuse the early Danish delays, which were, among other, due to time consuming consultation processes,but on the other hand point to difficulties in implementation, caused by increasing centralization throughout the planning process. It may also draw a more positive picture to the processes in the Netherlands and Austria, adopting management plans one by one, but ensuring participation and resolving major conflicts at this stage, hence likely facilitating later implementation.On the other hand, the complexity also draws attention to the aspect of commitment, which seem to be largely absent in the transposition process in Greece, that have

continuously needed pushes from EC warrants, infringement procedures etc. Even if a legal transposition literally translating the Habitats Directive into Greek law takes place, there is little incentive to follow up by aligning domestic laws in a way that make implementation feasible for local managers. Lately new laws have been adopted that may correct this image, but on other issues delays are still the common picture[2].

Given that the type of Europeanization mechanism selected in the Habitats Directive for the protection of European habitats and species is the institutional compliance type, it could be expected that adaptations of the existing legal frameworks and administrative set-up would then meet different responses in the different MS, according to the correspondence with domestic policy goals and interest constellations. Especially the domestic policies in the Netherlands and Austria, and maybe Romania, would be expected to influence implementation results, according to theory.

This can to some extent be confirmed by the experience in the Netherlands, where the former government downgraded biodiversity on the policy agenda, and made budget-cuts to the nature policy and Natura 2000 implementation. This has delayed the implementation processes, as has the downscaling of responsibility to the Provinces, without corresponding resource allocations. In Austria, difficulties related to the decentralized responsibility to Provinces, which have very different approaches to the implementation, has been a main issue, which result in differing approaches to the designation and implementation within the country. In Romania - as in Greece - the biodiversity does not score high on the policy agenda, which, however seems to play out differently in the transposition and implementation phase, possibly partly due to the transposition push experienced in Romania in the pre-accession phase, but explanation may also be found in different historical background and nature conservation approaches - an issue we have not explored sufficiently to draw conclusions.

For all countries, the main misfit remains with the pro-active conservation requirements, the management plans and the lack of funding for administrative tasks as well as for compensatory costs, either due to insufficient domestic funds, or to other mismatches. Not all Natura 2000 areas have an appointed responsible for implementation of the pro-active conservation, which have unfortunate implications for the management planning, attraction of funds, and compensations to land owners with losses due to the area restrictions. E.g. in Romania a specific concern is that restrictions have been applied from the adoption of the Natura 2000 areas, while compensations cannot be paid before the delayed management plans are ready. As stakeholderswere not involved in the designation process in practice, severe mistrust to the whole process has developed.

This highlights a problem, which is overriding in all countries except Denmark, which is the lack of communication and possibly active involvement in the designation phase. The public involvement has shown to be a major challenge for most countries and based on the interview information, it is crucial for later acceptance of the N2000 protection and the management activities to be upheld by different stakeholders. Lack of involvement has later showed up to be a severe barrier for co-operative processes in implementation, where conflicts with land owners create mistrust and opposition towards the Natura 2000 process. ECJ has clarified in a case against Ireland, Germany and France, that only scientific criteria could define the proposed SCI delimitations (European Commission 2003). However, from a gross list based on

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[2]The present state (August 2913) of 6 year article 17 reporting to the Commission (deadline 1st July 2013) reveals following status: Austria and Denmark reported with less than one month delays, while Romania, Greece and the Netherlands has not yet reported.

these criteria, a public involvement in selection could have turned out to ease later implementation. This lesson was learned the hard way in the Netherlands, where the guidelines for production of management plans now institute the involvement of stakeholders, while the draft management plan is alsopublished for public consultation.

Several court cases have documentedthat economic interestsencroaching on Natura 2000 land illustrate that lack of enforcement prevails in some countries. This highlights that very different designation strategies, which probably build on former nature conservation approaches, also have implications for the type of conflicts later met in the management of the areas, and that different strategies will be needed, when Nature 2000 areas consist of nature or farmland, or when whole villages or other build up areas such as summer houses are within the delimited Natura 2000 areas.

Issues related to the adequacy of funding instruments have been raised, especially in relation to the problems encountered when economic means rests with the decisions in agricultural ministries, favoring schemes and solutions which are most favorable to farmers, sometimes at the expense of the most optimal solution to nature conservation. It could be considered, if the current integration approach is the most appropriate solution to the implementation of the Habitats Directive, or if a Natura 2000 program, e.g. with schemes which can be applied for in a model like the rural development schemes would be more efficient. Re-designed funding solutions would also need to consider an apparent need for lower level training and expertise in management of the Natura 2000 requirements, as well as in application techniques.

8   Outcomes from the study on the Habitats Directive, and conclusions

While transposition processes differ widely over the countries studied, the timeliness has been an overall problem, only completed in the 00's for most countries (Greece only in 2011). Explanations to these delays are found both in terms of the complexity of the directive, and to a minor degree to a misfit between the requirements in the directive and the governance frameworks in the countries. Main explanations seem however, to align quite well to the study of Falkner et al. on the difference in compliance cultures, but also issues of lack of knowledge and scientific expertise during the delimitation phase are at stake. First transposition did often not transpose the directive in its totality and completeness was only reached after several amendments or adoption of new laws.

Misfits to the former regulatory structure to nature conservation thus seem to be a minor part of the explanation, where the main misfit relates to the instruments, especially to the mandatory adoption of the SACs and ensuing pro-active conservation obligation.This poses major challengesto member states. These challenges derive from different types of barriers to the implementation, including overriding domestic economic policy agendas, conflicts of interest in the Natura 2000 areas,and lack of early involvement in the processes.

Some adherence to the compliance types by Falkner et al were found, as the typology seems to fit reasonably for the transposition process in Denmark, the Netherlands and Greece, while data are insufficient to properly conclude on Austria, and it may be too early to make strong conclusions on Romania. These countries both candidate to the category of Domestic Policies, Romania shows however also signs of dead letter (lack of management plans and breach of regulations in relation to adoption of projects in Natura 2000 areas).

Policy integration seems to be an aspect requiring more attention - both at the domestic policy level, but also at the EU level. Legal frameworks especially between Natura 2000 management and Forestry sectorial policy needs to be addressed at domestic level, while policy integration and coordination with agriculture also need to find an appropriate form. Appropriate funding structures which can help implementation also at the local level still seem to be missing, both in terms of support to training of managers and also to the enforcement processes and compensation structures. Interactions between water and nature policies are especially critical in some countries (NL) but could probably be better explored in all countries.

9   List of most used abbreviations _HD

BD	Birds Directive
CAP	Common Agricultural Policy
ECJ	European Court of Justice
EHS	Ecological Main Structure (the Netherlands)
HD	Habitats Directive
LFA	Less Favored Areas
MoE	Ministry of the Environment
MS	Member States
N2000	Natura 2000
RDP	Rural Development Program
SAC	Special Areas of Conservation
SCI	Sites of Community Interest (pSCI: proposed SCI)

10 CAP pillar II AE schemes: Introduction and theoretical framework

This report constitutes one part of the deliverable for WP2.2, together with the analysis of the Habitats directive (HD) this is intended to fulfill the following requirements specified in the WP2.2 project proposal.

- Focus on the institutional interplay of EU policies and institutions on the one hand and of EU institutions and national/regional institutions on the other, focussing on their interaction, driving forces and effects on land change (in combination with WP1).
- To focus the work we will zoom in on aspects of the CAP, such as the set-aside regulation, and Natura2000 implementation (In combination with analysis of the HD).
- Study of land use policy and landscape change and the institutions which are responsible for or involved in land use and landscape management.
- What policies and regulations influence (whether or not on purpose) land use and the landscape?
- How is EU policy transposed into national policy,
- Which implications do national systems of governance have on the policy implementation?
- How is policy coherence among selected policies as well as the institutional interplay and its outcomes in terms of synergy and disruption of implementation and landscape impacts (In combination with analysis of the HD).
- It is expected that large shifts occur every now and then, as a result of new policies being implemented (In combination with analysis of the HD).
- The speed of implementation will depend on different factors, the financial incentives (and gains), presence of early innovators/farmers, land pressure, role of extension services etc.
- The analysis of policy implementation during the last 20 years will be carried out as a comparative study among the selected countries of the implementation of CAP and the Habitats directive. This analysis will follow a common analytical framework. Data for the analysis will be collected on national cases. It has been decided that these will be the same countries as used in WP1, in order to use local information from WP1 case areas. Case countries will include Greece, Romania, Denmark, the Netherlands and Austria.
- How are changes in agricultural subsidy systems transposed and implemented, in particular of the Common Agricultural Policy (health check including change to single payment scheme, abolishment of the mandatory set aside and the measures under the Rural Development Program 2007-2013) as well as the Habitats Directive during the last 20 years?

The content of the report is largely a summary of the deliverables from partners on national implementations of the CAP pillar II.

The descriptions in the report have however been supplemented with additional information, particularly regarding the historical perspectives of the analysis, through use of the independent 2005 evaluation by the international environmental consultancy company Oreade Breche (Oreade Breche 2005). Part of the national descriptions have been taken directly from this evaluation, and should almostbe set in quotation marks. This is particularly the case for the description of Greece and to some extent for part of the Dutch case study.

Theoretically the summary and analysis builds on institutions as described in Ostrom (2007), who defines institutions as "rules, norms, and strategies adopted by individuals operating within or across organizations"… "By rules I mean the shared prescriptions that are mutually understood and predictably

enforced in particular situations by agents responsible for monitoring conduct and imposing sanctions,"… "by norms, I mean shared prescriptions that tend to be enforced by the participants themselves through internally and externally imposed costs and inducements" and "By strategies, I mean the regularized plans that individuals make within the structure of incentives produced by rules, norms and expectations of the likely behavior of others in a situation affected by relevant physical and material conditions"

The concept is however refined and generalized on organizational level by Powell and DiMaggio, (1991), who define how "Institutions are shaped by historical factors, that limit the range of options open to decision makers, thus they produce different results than those implemented by a theory of unlimited choices, and strategic responses" (p. 4). Compared to institutions in economics, institutions in organizations theory, are described as "In the former [economic] approaches, institutions are products of human design, the outcomes of purposive actions by instrumentally oriented individuals, but in the latter, while institutions are certainly the result of human activity, they are not necessarily the products of conscious design " (p. 8)

March and Olson (1989) explain this by use of the following two concepts: the 'basis of actions' and the 'historical efficiency'. The basis of actions can be driven either by 'logic of expected consequences', or 'logic of appropriateness', and history can be either 'efficient' or 'inefficient'. Logic of expected consequences defines actions that are rationally calculated and well considered, whereas logic of appropriateness is defined according to the situation, and the decision is taken according to rules that are not necessarily rational. Efficient history covers a perspective where history is forth flowing and oriented towards a final goal or optimum, whereas ineffective history describes a world where history barely constitutes the background for decision and the logical rational choice, rather than a strive towards an optimal condition.

Table 10 (from March and Olson (1989))

	Logic of consequences	Logic of appropriateness
Efficient history	Functional rationality	Functional institutionalism
Inefficient History	History dependent rationality	History dependent Institutionalism

Combined in a 2x2 matrix (Table 10), March and Olson identify four perspectives on institutional development: Functional rationality, History dependent rationality, Functional institutionalism, and History dependent Institutionalism, with the latter, as the most commonly used concept in institutional analysis.

To operationalize the concept of institutions, we are inspired by the following approach by Falkner et al (2007) and Falkner and Treib (2008), aiming at a generalized description of the institutional characteristic of an administration or a national state i.e. to get an overview of the national institutional framework, without analyzing the actions of the individual. Through this approach we work on an analysis using institutional frameworks as an explanatory factor, however observed not through the actors use of rules, but through combining the knowledge of past and current implementation in existing and new organizational and institutional structures, and by use of defined barriers in order to identify any observations of when the institutional framework in place has proved inefficient or insufficient.

In European context, it can be argued that much implementation is done through existing structures and the Europeanization is partially influencing this structure, but also influenced by existing examples of institutional frameworks (Montpetit 2000, Trouve and Berriet-Solliec 2012).

As for the implementation of the CAP it can be said that a probe was done with the voluntary regulation 797/85 where distribution was tested in several countries, and already some had existing institutional framework directed/ oriented/ primed for implementing agri-environmental measures.

Falkner et al (2007, 2008) developed their theory based on a quantitative study of the transposition of 6 European Union labour laws, and argue that neither the fit/misfit hypothesis nor other more or less prominent theoretical approaches, such as the veto-player approach, in which the number of veto players in the transposition process is seen as mediating factors, yield satisfactory explanations as to the case of transposition of the labour laws. Exploring their data more inductively, they find however a certain pattern of compliance among the countries, which indicate that a policy culture of compliance may exist, and they identify first three (Falkner et al 2007), and later, based on an extended study including later accession countries, four (Falkner and Treib 2008) 'ideal' compliance types (modes of treating transposition duties), within which different factors may be constituent for the outcome. For characteristics please see section 2.1 p. 12.

The results from Falkner et al (2007, 2008) predominantly derive from the study of the transposition processes, and they argue that this typology may form a relevant filter for deciding which theoretical factors should have focus for explaining implementation processes. In this way, they arrive at an analytical framework in which countries are firstly distinguished according to the 'culture of compliance', as this will guide which factors may be most relevant to investigate further on.

The approach in this report builds on identification of institutions through descriptions of the authorities and organizations engaged in the transposition and implementation of the regulations. In order to identify this, questions have been asked about the following:

  a. Legal implementation (adaptations/new laws)
  b. Content/objectives
  c. Type of policy instruments and measures
  d. Decision-making structure and process (involvement/stakeholder interest)
  e. Financial model
  f. Roles and responsibilities in implementation/coordinating bodies
  g. Expected actors/target groups
  h. Evidence of landscape impact
  i. Barriers to implementation
    i. Documented
    ii. Perceived by respondents (adequacy of schemes, structure of enforcement, barriers to uptake, financial aspects, impacts)

The obtained information is subsequently combined for each of the cases (per country) in more thorough descriptions of scheme implementation in terms of:

- Transposition
- Implementation
- Barriers and

- Outcomes/impacts

The knowledge about the transposition reveals to what extent (which) existing institutional frameworks have been used in the implementation process of the RDP, and whether changes have taken place as a consequence of the recent changes in terms of:

- Heath check
- HD implementation
- Crisis in the EC (worldwide shock)
- New programming periods (window of opportunity)

The state of the art of the current implementation reveals to what extent the chosen framework uses national and regional authorities etc. in the implementation of the CAP, and to allows to compare policy implementation and institutional framework for the AES before and after implementation of the Habitats directive. To use the terminology of March and Olson, it is a question of the load/dead weight of logic of appropriateness or 'sequencing of the policy' in terms used by Dauggaard (2009).

On the background of the described themes of transposition and implementation structure, identification of barriers and outcomes reveals whether any specific problems (also of institutional character have been observed) and whether the overall outcomes/impacts are adequate for the policy. Problems of obtaining desired outcomes/impacts of a policy are not necessarily caused by problems in the institutional framework; however the reason may be a failed strategy of implementation in a misleading institutional framework (agriculture contra environment).

For the general characteristic of the policy we use the following theoretical approaches. Theesfeld et al. (2010), provides a framework of relevant policies based on the type of policy intervention in question (regulatory, economic, advisory), and which area of intervention needed to be addressed (governance structure) in order to address the subject of the policy (hierarchy, market, self-organized), in this case the landowner. This framework is constructed with examples in a 3x3 matrix specifying different examples of intervention. In addition a column describing changes in property rights is defined for each type of intervention.

As a supplement to this characterization of policies, with corresponding indicators of institutional fit, the typology of Knill and Lehmkuhl (2002), defines three mechanisms that may be used or defined in regulations and directives that are implemented in member states.

- institutional compliance (requires changes of institutional structures in order to assure the correct institutions are in place in order to implement the policy/legislation)
- changing domestic opportunity structures, (requires a change in existing domestic institutions that would otherwise be in contrast to the implementation new regulation, however no specific and mandatory institutions are defined in order to implement the legislation)
- framing domestic beliefs and expectations (no specific demands required in order to implement the legislation)

Depending on the existing domestic structure there is either a likelihood of success or failure of policy implementation, described in a decision tree structure, for each of the described mechanisms.

11 Analysis of the Agri-environmental schemes

The object of this study is the agri-environmental schemes (AES). The schemes have a history dating back to the middle of the 1980ies. The first schemes were implemented in EU member states independently of EU regulation. The present study focuses on the schemes that have been implemented as a response to the Rural Development Program and its forerunner, the accompanying measures to the CAP. This study pays specific attention to the environmental program and the agri-environmental schemes within the RDP, as this part of the program would be expected to be able to inflict landscape changes, if successful.

In the case studies, we focus on the national implementation of EU agri-environmental policy. The policy can be divided into four main reform periods, with:

1985 - 1992: Predecessor to the accompanying measures implemented under regulation 797/85

1992 – 2000: The MacSharry reform accompanying measures (voluntary)

2000-2006: Agenda2000 reform establishing the two pillars of the CAP, with agri-environmental policy as one axis in pillar 2 (compulsory). In 2003 a reform, introducing a.o. the Single Payment Scheme were introduced

2007-2013: The second rural development program including agri-environmental schemes. The Health Check reform implemented in 2009 changed a.o. the agri-environmental schemes, strengthening the policy integration to policy areas concerning challenges in managing water, biodiversity, climate and energy.

Definitions:

It is distinguished between agri-environmental programmes, schemes and measures. An agri-environment programme is considered to be the collection of schemes implemented in a country. Individual schemes have different objectives (e.g. reducing nutrient emissions or protecting biodiversity) and may consist of a set of measures (e.g. wetland construction and buffer zones, or extensification of grassland management)

11.1 Objectives and instruments

In brief the measures have had a variation of stated objectives. Depending on the period analysed, the following has been overall stated objectives, and in the whole period the measures have been based on voluntary participation of the farmers in schemes defining certain practices/land use on agreement areas. Payments for entering the schemes is generally calculated as a compensation based on the income forgone/ costs incurred plus a minor incentive for participating in the scheme:

1985 - 1992: Voluntary accompanying measures in northern European countries as a counter weight to the Less Favoured Areas (LFA) in southern Europe

1992-1999: The MacSharry reform – accompanying measures

The CAP is an EU regulation, which implies that all member states are obliged to implement the regulation as it is formulated. In terms of accompanying measures to the CAP, introduced under the MacSharry reform, the agri-environmental scheme was one scheme out of three, namely:

- Subsidies to environmentally friendly production methods
- Early retirement
- Subsidies to forestry

By introduction of the Rural Development Program (RDP) 2000-2006, the intention was to include the AES in a complete program taking care of the problems of the rural development. The EU RDP is a regulation, and for the following study, the focus is on chapter V: Less favored areas, and chapter VI: environmentally friendly agriculture. The RDP 2000-2006 exclusively used voluntary agreements and financial aid as instruments.

By the introduction of the RDP 2007-2013 (Council Regulation (EC) 1698/2005 and Council Decision 2006/144/EC) (CEC, 2006) 4 axes were specified under which subsidies could be attained from the European Agricultural Fund for Rural Development: "Improving the competitiveness of the agricultural and forestry sector" (axis 1), "Improving the environment and the countryside" (axis 2), "The quality of life in rural areas and diversification of the rural economy" (axis 3), and "Building local capacity for employment and diversification (Leader+)" (axis 4). The former three match the objectives in the regulation, whereas the latter is more process oriented and aimed at stakeholder involvement.

11.2 Policy type

Using the typology of Theesfeld et al. (2010) and Knill and Lehmkuhl (2002), the Europeanization mechanism used in the AES, can be characterized as 'changing domestic opportunity structures', since to some extent, the intervention was accompanying to the Mac Sharry reform, and thus offered an alternative to the price support of agricultural products. A more vague interpretation of the policy would characterize it as 'framing domestic beliefs and expectations', since it does not interfere with how schemes are implemented, and there are no predefined subjects that need to be covered by the schemes.

The instrument is defined as a market instrument, which clearly influences the farmer through economic compensation on a voluntary basis. It may however be considered that well-functioning advisory services may facilitate uptakes and understanding of the best possible implementation of the required agricultural practices on the agreement areas.

12 Summary of collected data describing AES

A tabular summary of the contents of national reports is provided in table 11.

After presentation of the table, the four central aspects of policy implementation is described for each case (countries: Netherlands, Austria, Greece, Romania, and Denmark): <u>transposition</u>, and <u>implementation</u>, and analysis of among others the institutional success through description of <u>barriers</u> and <u>outcomes/impacts</u>. The questions posed and answered in the tabular setup have served as input for description of these four central aspects of policy implementation and description of the institutional framework.

In order to read the table the following list of abbreviations is useful:

- ADS Agency for Administration of State owned land
- AEAP Aquatic Environmental Action Plan (WMP I-III)
- ANCA Agency for Technical Assistance in Agriculture
- APIA Agency of Payments and Intervention in Agriculture
- APRDF Agency of Payments of Rural Development and Fishery
- CAAC: Chambers of Agriculture and Agricultural Cooperatives (Austria)
- CDA County Directorates for Agriculture
- DLG Government service for land and water management
- EFA Environmentally Friendly Agriculture (MVJ)
- ELI Ministry of Economic affairs, Agriculture and Innovation
- EM Environmental Ministry
- EPA Environmental Protection authorities
- ESA Environmentally Sensitive Areas
- FCNF Farmers cooperatives for nature conservation
- FCS: Farm Conservation scheme (Netherlands)
- FU Farmers Union
- FVM Ministry of Food, Fisheries and agriculture
- IPO, Representative body of Provinces
- LAP, Landscape Area Plan
- MA Ministry of agriculture (Netherlands)
- MA Municipal administration
- MAFEW: Federal Ministry of Agriculture, Forestry, Environment and Water Management (Austria)
- MAP, Management Area Plan
- MARD Ministry of Agricultural and Rural Development
- MESPH Ministry of Environment Spatial Planning and Housing
- MEWMF Ministry of Environment, Water Management and Forests
- NAFA National Agency for Fishery and Aquaculture
- NAfSAPARD National Agency for SAPARD
- NAP, Nature Area Plan
- NCTA National consulting and Training Agency.
- RDP: Rural Development Programme
- RPOP RegieBureau POP
- SAPARD, Special Accession Programme for Agriculture and Rural Development
- UvW Association of Water Boards
- VNG Association of Netherlands Municipalities
- WILG Rural Areas Development Act

Table 11: Overview of inputs from casestudies

Question\Country	Austria	Netherlands	Romania	Greece	Denmark
General comment	-	1999, a program was constructed basis on existing national and regional plans, 2004, RDP has been coordinated in MJP1 2007 MJP2 ~RDP	Romania was implementing the RDP through the SAPARD, from 2000-2006, and participates in the RDP 2007-2013	The CAP had a significant impact on the composition of the agricultural production. It favored the typical Mediterranean products at the expense of animal products. Greece had a positive agricultural balance of trade, but after EU accession it became negative.	-
1. Legal implementation (adaptations/new laws)	Some law amendments from 1995 and onwards (undocumented in case study)	Changes of FCS by 2000, otherwise largely based on existing legislation Rural Areas Development Act (WILG, 2007)	A basic law complex has been built partially to convert land from public to private property and in order to create institutions markets and authorities in order to be able to receive the CAP measures in general.	Several law changes, Law 3752/2009 (Amendment 3614/07) Law 3840/2010 Law 3614/2007. Ministerial decisions implementing schemes.	Several ministerial orders have described the implementation of the EC regulations. Regulations with reference are specified in Danish laws, and modification of laws implementing the regulations.
a. Is the national implementation based on a national plan except for what is recommended by the EC (an independent policy area)		Yes, there appears to be a national implementation strategy, the MJP(1 and 2)	No	No	Yes, The efforts for improving nature and biodiversity conditions as well as climate and competitiveness is organized in the "Green growth" plan. Earlier the measures were significantly influenced by the AEAP (WMP I-III)
2. Content/objectives	1995: maintain land use in remote areas 2007: Promote ecologically sensitive forms of agriculture, maintain cultural landscapes support organic farming	->2000-2013: Focus on biodiversity. Soil, water, air, and landscape impacts are side effects. Agricultural pollution policies handled in coercive regulation	->2000: Restoration of land ownership, develop land market, develop legal conditions to stimulate association of subsistence farms to production farms 2000-2006: transpose EU CAP policy objectives to domestic policy, develop institutional and regulatory frameworks to implement CAP 2007: Structural development, while preserving cultural heritage and rural landscapes (+ food quality, biodiversity (Directives), training and education).	->2000 early retirement of old farmers, and side effects in terms of structural reform, and environmental benefits + biodiversity 2000-2006 (viable countryside) Early retirement, encouraging larger farms and succession to younger farmers Support for farmers in LFA and mountains. AES Afforestation 2007-2013: competitiveness of agric + forest sector. AES, Life in Rural areas and leader.	->2000 broad set of schemes, of which some were in the first period targeting nature in designated areas, and some targeted the aquatic environment 2000-2006: list of independent (sectorial) policies, however to a large extent used for protection of the aquatic environment with little success (Nitrates Directive). 2007-2013:Integrated approach, facilitating use of measures in eg Natura2000 areas, for improvement of biodiversity, and for supporting the WFD.
3. Type of policy instruments and measures (AES is defined as subsidy, from wider AE perspective directives are supplying with regulation, by EC design)	Subsidies, and part of the earlier subsidized actions moved to Cross compliance regulation by 2007	Subsidies, since 2000, Farm conservation (1980->SAN) -> subsidy for nature and landscape(SNL, by 2010) Organic farming(OFS->2007) Domestic rare breeds(->2006)	Subsidies, given to projects, developing land reform and rural development , + institutional organizational development facilitating post accession programs LIFE nature program Credits and tax reduction. Subsidies	Subsidies, ->2000-not confirmed (structural development, wine, water, advice, crop damage by frost) 2000-2006 hydrology, olive groves, viticulture, hedgerows (early retirement, LFA, AEM, afforestation) 2007-2013: support mountainous areas and LFA, Natura 2000 payments, AEM payments	Subsidies (most are geographically oriented). Cross compliance did not replace any of the subsidies, but was used for strengthening the currently defined regulation (from EC perspective mainly to fulfill the nitrates directive). By 2009 mandatory andfinanced requirement of 10 m border zones around fresh water structures (lakes and streams), and increased focus on Biodiversity and water (to (co) finance HD and WFD efforts)

4. Decision-making structure and process (involvement/stakeholder interest)	Fed Min of Agr, For, Env and Water is responsible for defining Nat. strategy plan and RDP. Involved are the MAFEW, Agrarmarkt Austria, regional governments, and Chamber of agr. and Agr. Cooperatives	MA, IPO, MESPH were in the writing team VNG UvW and NGO's invited by RPOP in consultation meetings [i] SAN co-developed with FU and FCNC OFS negotiated with FU and Biologica By 2010, the SAN->SNL, in order to simpler goal oriented ecologically founded developed with provincesgov and organizations [ii]	MARD is leading with co-operating with MEWMF,ADS responsible on state owned land, NAFA in charge of policy implementation, APIA + APRDF is technical implementer payments. Decentralized decisions on allocation. NCTA responsible for training.	Decision on measure taken nationally (MRDF) and locally (RAB). Responsible for implementation: Peripheral and local adm. bodies. Initially participative (very diverse program) However this has not been a success in later programs (leader works participatory, but AES is not under their responsibility)	Responsibility has changed over the years from 797/85 (MFO), counties had own response for design of schemes. By 1992, FVM designed schemes, but counties designated ESA, where schemes could be applied. EM responsible for forestry, WFD and N2000 related planning. By 1997, counties gained full responsibility over schemes, and by 1999 FVM regained full ownership og the policy formulation. FVMand EM formulate the policy by help of stakeholders (Env. NGO's, public authorities representatives, eg. Municipalities organisation) By 2006 broad including process with meetings over the country to improve the 2007-2013 program.
5. Financial model	Huge weight on pillar II	Pillar I pillar II uneven distribution over the country (depending on provinces choice and distribution of economic means between provinces)	Due to lack of well-functioning implementation structure and applicants the budget is not fully used (37 pct.). Modulation is not used, since it requires co-financing from the state. AES is comparatively well allocate (78 pct.) share is about 1/9th of RDP	Out of Pillar II AES constitutes 1/5 th of total expenditure, whereas 1/3 EAFRD means are used on AES.	EFA including organic farming constituted 37 pct. of the pillar II spending in the 2000-2006 period.
a. How about AES (Biodiversity) share of pillar II?? (excluding the LFA and structural adoption part)	-	-	AES is comparatively well allocate (78 pct.) share is about 1/9th of RDP	Out of Pillar II AES constitutes 1/5th of total expenditure, whereas 1/3rd EAFRD means are used on AES.	EFA including organic farming constituted 37 pct. of the pillar II spending in the 2000-2006 period.
6. Roles and responsibilities in implementation/coordinating bodies	-	ELI (objectives, distribution of means), Provinces: (area designations (NAP, LAP, MAP), administration of means) DLG (advice implementation by making contracts, calculating payments) UvW and NGO's advice on local sites and sometimes implement. Coordination institutionalized in RPOP and IPO	MARD is leading with cooperating with MEWMF, RDP made in process with scientific panels, inter-ministerial cooperation, stakeholders: NGO's incl. public and private sector. CDA and MA implementers with regional and local cadastral offices and ANCA APIA admin of payments (central, regional and local units) EPA provide information on N2000.	Self-organized involvement of stakeholders (citizens, farmers, farmers cooperatives, environmentalists, NGO's), implementation by SASRDP-C, well-advertised.	Two models have been used: FVM is responsible for handling subsidies, and designations are made by other institutions (Counties/municipalities (ESA)/ME (Natura 2000)) Local coordination may be taken care of in locally defined projects, or by Agric advisors. Municipalities have an upcoming role with Natura 2000 implementation Counties are responsible for handling subsidies, and designations, country wide schemes are handled by FVM. Local coordination/facilitation by counties. Currently the first model is running I DK. By 2004 ESA is defacto replaced byN2000 designations in management of subsidies.

a. Is there any records on advisors roles in this process, and is advisory system public or private?			Advisors have been implemented as part of the restructuring and is handled from government.	The state is responsible for dissemination of knowledge about the AES, and thus provides advice on how and what agreements to sign, however there is limited capacity and skills are questioned.	Advisors are private, but subsidized by 70 percent by the state. With recent Nature2000 plans Municipalities engage in advice to private landowners. Since counties were abolished there has been no active public promotion or coordination of AES uptakes in specific areas.
7. Expected actors/target groups	All farmers	SAN, SNL: Farmers, however within planning areas, and depending on other farmers applying (max uptake rate is set per designated area)	Farmers/ landowners (from subsistence to viable production farms)	Entrepreneurs and farmers	Farmers, publicly owned land in natura2000 (Municipalities).
8. Evidence of landscape impact	-	Objectives concerning nature conservation not reached even though budget and uptake was sufficient. Landscape impacts are estimated to be targeted in most schemes/packages, however an interviewee points out that landscape is still declining	Appear to be some disagreement, from landscape changes are not a consequence of AES, to Conservation of habitat and landscape are the most beneficial effects.	Impact on production structure, plus landscape and Natura2000. High uptakes, little documented on impact. Landscape impact estimated as maintenancerather than protection. High impact on types of land use (agric. products)	Basically there are good records of uptakes, but anticipated documentation on landscape effects. This includes likely improved conditions on permanent grasslands, and anticipated better conditions for flora and fauna on organically farmed areas.
9. Barriers to implementation	See below				
a. Documented		Actions in local plans for landscape is an option but only co-financed with 50 %	*Inefficient information campaign *Inadequate implementation, *Inadequate means for consultancy *Demographic structure and dynamics[iii] *Ownership structure and dynamics[iv] *Designated areas for certain schemes *Lack of monitoring *Lack of vertical coordination *Debts restricts some from receiving grants *Expensive credits for co-financing *Economic recession *Bureaucratic procedures *Problem identifying the legal owner of land (property rights) needs to be in place before subsidies can be applied for *High land transaction costs	Lack of local integration of AES (not included in the LEADER), Insufficient management personnel (and lack of motivation), lack of knowledge among farmers, non-satisfactory payments for some schemes. Difficult caused by physical farm structures. AES are not addressing problems in local conditions (AES need better planning to tackle respective problems). Information about subsidies needs to be improved. Technical problems in implementation structure	* Uncertainties concerning the effects of regional/local coordination (counties) , which has been estimated to be inefficient. * uncertainty regarding the priority of broad and shallow vs. deep and narrow schemes * Uncertainty regarding the future requirements in Natura-2000 areas, and consequences to farmers. * no reimbursement of municipality expenses for facilitation of N2000 planning with AES. Scheme complexity and lack of flexibility Farmers lack of knowledge about schemes and content Lack of coordination and facilitation Schemes to compensate for losses due to migratory birds(Geese) Lack of organizational coordination between ME and FVM
b. Percieved	Farmers and politicians want a simpler system, and in some cases payments are considered inadequate.			Farmers perceive schemes as additional paperwork, that does not pay off and reduce their production potential. Schemes rationality difficult to follow for farmers.	

12.1 Netherlands

12.1.1 Transposition

The agri-environmental measures have a long history in Netherlands. As pointed out the DLG: "Brussels used inputs from NL to develop the agri-environmental measures". The predecessor BOL/BAL subsidized maintenance of small landscape elements from 1977-1987, followed by ROL/RAL (Van Wijk 2008). The Farm Conservation scheme (SAN) has existed since 2000 and the organic farming scheme (RSBP) was introduced in 1994.

By 2000 the first rural development plan (RDP) was initiated, but it is described as a programme based on a sectorial approach rather than an integrated rural policy. The agri-environmental part is exclusively focused on biodiversity, and other effects are regarded as externalities.

The first programme was designed with inputs from the 12 provinces and their existing regional plans, and thus based on existing rural and agricultural policies. The work was done under monitoring of a committee consisting of Ministry of Agriculture, Nature Conservation and Fisheries (Ministry LNV), Ministry of Environment and Spatial Planning (VROM), the Ministry of Transport and Water Management, and the Ministry of Education, Culture and Science. The representative body of the provinces IPO was consulted. The eventual program was supplemented by national schemes from LNV and VROM. The programme was cleared with a.o. the farmers union and environmental organisations through the 'Consultative Platform for Rural Areas'.

The result was a program consisting of inherited national and regional plans. This has likely been to the benefit of regional and local institutional recognition of content and implementation. As pointed out by one interviewee: "where can we put EU money inside our programme?" The provinces gained control of the daily administrative implementation of the programme through the 'RegieBureau-POP' (POP), which is the joint body of Ministry of Agriculture and the 12 provinces for daily RDP matters.

The POP is a provincial implementation plan for the Rural Development Program. It is prepared by all provinces and provides the basis for the expenditure of the CAP with the overall aim to stimulate multifunctional land use (Figure 5).

Under the RDP 2007-2013, the POP2 (2007-2013) coordinates measures in terms of 'green deals', and agri-environmental measures. Green deals are new innovative cooperation forms between nature conservation and farmers, to reach more sustainable land use. Municipalities can participate and apply for expenditures for environmental management.

1. Land re-allotment, and farming innovation
2. Water conservation, for
   a. Safety, rivers
   b. Water conservation   Biodiversity
   Landscape, Less Favoured Areas
   Sustainable agriculture (reduce emissions, machinery)
3. Broaden agriculture, multifunctionality: education, health, biofuels
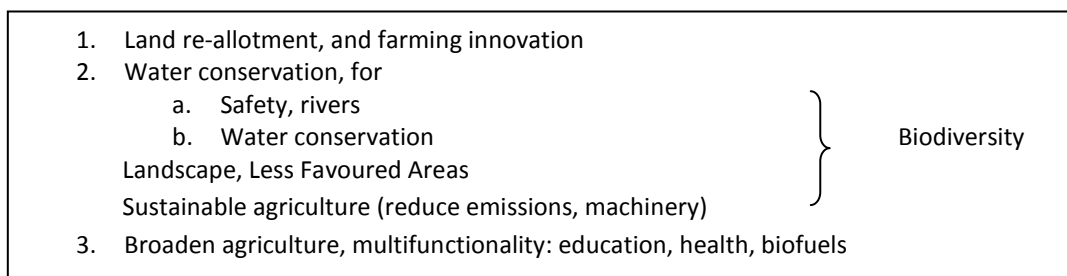
Figure 5: The POP The POP has three main elements(Oltmer et al. 2011) :

Several changes were introduced in the first programming period. By 2000 the SAN was changed in a more complex direction to include large scale packages (>100 ha) in favour of grassland birds, and several conservation options to choose from, and a result oriented approach in terms of concrete targets (e.g. amount of nesting birds or number of specific plant species). By 2002 a measure for Rare Domestic Breeds was introduced, and by 2006, the scheme for conversion of organic farming was terminated.

The current agri-environmental schemes constitute the schemes listed in table 12:

Table 12 Dutch agri-environmental schemes from 2000 to 2012

Dutch name of the scheme and abbreviation	English translation	Period
Subsidieregeling Agrarisch Natuurbeheer, SAN	Farmland Conservation Scheme	2000-2010
Subsidie Natuur en Landschap, SNL	Subsidy for Nature and Landscape	2010-present
Regeling Stimulering Biologische Productiemethoden, RSBP	Organic Farming Scheme	2000-2007
Subsidieregeling Zeldzame huisdierrassen, SZL	Rare Domestic Breeds Scheme	2002-2006

In parallel to the RDP, a Multi-Year Programme for a living countryside (MJP1), was designed in 2004 based on: Agenda for a living countryside (Ministry of LNV) and the Memorandum on a National Spatial Strategy (Nota Ruimte, VROM) This marked the first attempt to policy integration and the first broader rural programme.

In 2005, the Government, the provinces, the Association of Netherlands Municipalities (VNG) and the Association of Water Boards (UvW) agreed on the Rural Areas Development Act (WILG) coming into effect from 2007 and dealing with everything regarding rural development.

A Second Multi-year programme for a living countryside (MJP2) was launched in 2007, establishing a new administrative model facilitating the on-going decentralization from the government to the provinces. The MPJ2 is a national initiative independent of the EU. It delegates power to the provinces, and steering by central government is only on main targets. The Central government defines main targets and will check the outcome, the provinces define the provincial policy. It is based on the single funding system set up with the ILG (Investment budget Rural Areas), joining the budget of different ministries. Topics of the MJP2 address agriculture, landscape, environment, nature or water. The MPJ2 is running in parallel to European RDP for the period 2007-2013, and structures Dutch rural development policy. Where objectives overlap with EU policy, EU objectives have been chosen.

The attitude adopted for the formulation of the MJP2 is pro-active compared to the RDP, and the RDP is counted secondary and its budget regarded primarily as « welcome additional resource » for Dutch policy implementation.

The 2007-2013 program was coordinated by the Ministry of Agriculture, and the Representative body of provinces IPO was directly involved in the writing team. The Ministry of Environment, Spatial Planning and Housing, traditionally a strong policy actor in rural affairs advocating for rural functional integration, had a strong position in the debate. The Commission of the representative bodies of the municipalities (VNG),

Water Board, NGOs & market parties were invited twice to general consultation meetings organized by the Regiebureau POP. They could also make use of written consultation.

12.1.2 Description of the Administrative structures for AES (over time)

The delegation of roles in the administrative structure of the AES is as follows (Table 13): The SAN and SNL are a co-production of the Ministry of Agriculture and the twelve Dutch provinces. In cooperation, allocation of quotas for each province and the packages are decided. On the scheme content, there is also some room for introduction of new, regionally tailored packages, but this is perceived to be (too) small.

The provinces are responsible for the designations of areas where subsidies can be applied for, and several conditions need to be in place before a subsidy is available to the private farmer:

Areas needs to be designated, and three types of area plans needs to be defined: the nature area plan, the landscape area plan and the management area plan ('natuurgebiedsplan, landschapsgebiedsplan, beheersgebiedsplan'). These plans indicate which biodiversity (e.g. meadow birds, native plant species or hedgerows) should be conserved, managed or developed on that particular location.

These targets correspond to different packages of actions that the subsidy receiver should effectuate on the agreement area. For each area on the map, the provincial authorities have generally indicated multiple possible packages. Farmers can then choose if they want to apply for subsidy and which package they will agree to: the one which best matches their own ambitions, farming operations and the local situation. A request for a package must fit within the objectives of the area plan for subsidy eligibility.

To prevent all the farmers from choosing the same package (so that a range of ecological qualities are developed everywhere), the provincial authorities have set a quota for each package for each area on the map. These quotas indicate how many hectares the province can be subsidized by packages.

The measure targets conservation of biodiversity in agricultural areas and protection zones surrounding nature reserves as part of the National Ecological Network. It is coordinated with another scheme (SN) targeted to nature organisations and management of the nature area they own in the Stewardship Program ('Programa Beheer'). The Provinces claim that they try to link environmental measures with Natura 2000.

With the replacement of SAN with Subsidy system for Nature and Landscape Management (SNL), the aim was a simpler, more goal oriented scheme with a sounder ecological foundation. The SNL is the responsibility of the twelve provinces, developed in close cooperation with various organizations and government administrators. An important change is that the payment is no longer calculated according to the result (such as the number of plants counted). It is now based on the management carried out. Furthermore there are fewer management packages, and they have been simplified. The payment rates have been adjusted and will be reviewed annually using an objective method.

While the provinces are responsible for the implementation, the Government Service for Land and Water Management (DLG) is in charge of the contacts to recipients of the subsidies. The DLG make contracts with farmers in the name of Provinces, and they are in charge of the communication, including the brochures, and they calculate payments. The amount of the subsidy depends on the type of package and area or meters units concerned. It is adjusted each year on the basis of income and yield losses.

The Regiebureau (POP) works closely with DLG and is in charge of the communication with Brussels for Ministry and Provinces. It is in charge of notifications, letters, appointments, reporting, budgets, and juridical documentation.

DLG and POP are not policy makers, but carry out the administration, and facilitate and improve the processes. Coordination between engaged stakeholders is institutionalized in the Regiebureau, which is the institutionalized coordinating body, staffed with government employees. However the IPO, InterProvincial coordinating body, is an informal platform where the provinces meet and discuss or align their programs. There is however hardly any exchange between the CAP organisation and the water sector (Ministry of Roads and River authorities). In particular the Water Framework Directive is implemented with hardly any coordination with CAP and Natura 2000 efforts. However it is mentioned that Water Boards and NGOs can contribute with knowledge of local sites, and that they advice and sometimes implement desired actions.

Table 13: The Delegation of roles

Administration	Tasks
Ministry ELI (LNV)	o Set up the objectives, schemes o Is responsible in the end for the objectives
Provinces	o Set up the objectives, schemes o Implement the objectives
Regiebureau POP	o Overall organisation and control o Staff and finance provided by Ministry ELI and provinces
Government Service for Land and Water Management (DLG)	o Advise, facilitate the implementation (e.g. makes the contracts with farmers, calculates payments etc.) o Work in the name of the province
Government (for monitoring species and habitats), Provincis and Ministries (for management plans, measures)	o Monitoring

12.1.3 Observed (institutional) barriers to AES

In the first programme, the fragmented content brought a lack of overall focus in the programme, lack of clarity at the start and considerable fragmentation of the available budget over different instruments with negative consequences for effectiveness and efficiency.

A related barrier experienced by the provinces was the lack of financial flexibility during the programme as it was not possible to move money between axes. However, inside the axes, money could be oriented to the instruments that worked well.

In the RDP2, interviews highlight that the implementation of the second pillar is still complex and bureaucratic.

Schemes are considered too specific. Policy-makers want to detail every exception to comply with Brussels. This refinement is also seen as important by the ecologists. This makes schemes difficult to implement and more generic packages would be easier to apply.

The control is made difficult by the lack of technological means, e.g. how to define temporarily flooded grasslands from aerial photographs, or the length of hedgerows?

It is also stated that the coordination is too formalised. i.e. there are too many administrative layers included in the coordination. For example, the writing process of the time schedule for the implementation took two years.

In addition it is stated that there is a lack of integration between nature/farming/water because these are different budgets, e.g. conservation measures are not easily paid for from the farming budget.

It is concluded that the output targets are not met, in particular with regard to halting the loss of biodiversity: biodiversity is declining, despite the fact that most of the budget is spent here. Many High Nature Value Farmlands are insufficiently covering the important areas for biodiversity (Verburg et al. 2009). 24% of the species which require measures in the frame of Natura2000 are found in farmland, and are continuously declining (Bouwma et al. 2009; Bouwma et al. 2012; Verburg et al. 2009). As a consequence, biodiversity loss is continuing (Oltmer et al. 2011), and populations of farmland birds are still declining because farmland is still too intensively managed to realize suitable habitats for birds (Kleijn et al. 2006; Kleijn et al. 2001).

Barriers to success are identified as:

- The coverage of important farmlands is too thinly spread (OECD 2008).
- More strict management regimes are required,
- Lack of continuity in management, and
- Current payments (per ha) are not sufficient to achieve the targets.

A proposed improvement is increased decentralisation, with a shift of responsibility and implementation from the national government to the provinces. Since 2010, each Province has been allowed to make its own changes and to decide which packages can be proposed to farmers through the SNL. Implementation and evaluation will be much more in line with the regional conditions.

Concerns are expressed regarding the fact that an overall picture of the nation-wide achievement of the conservation policy targets required for justifying ratification of international and national obligations, is unlikely based on decentralized programmes. This is to the disadvantage of directing and controlling decentralized and regional programmes.

There is a lack of funding to implement the measures and achieve objectives. Less areas can be included than required in order to provide desired impacts.

From the farmers' perspective, there is a problem of contracts being made for several (up to 6) years,because the payments (compensation) varies based on yearly rates. The payment is adjusted each year on the basis of income and yield losses. The amount of the subsidy depends on the type of package and area or meters of the units concerned.

12.1.4 Outputs/impacts

Formally the outputs in terms of uptakes of the AES in the Netherlands exist, however it is the overall conclusion that the results in terms of protection and improvement of conditions for biodiversity have not been reached. The Council for the Environment and Infrastructure, an advisory body of the government, has evaluated the current conservation practice, and in particular the use of AES (Council for the

Environment and Infrastructure 2013). This report, which is partly based on studies of effectiveness of AES, is negative towards the current results, and based on this the existing subsidies were stopped in May 2013.

12.2 Austria

12.2.1 Description of the transposition

By the accession of Austria in the EU in 1995, the 'Austrian Program to promote agricultural production methods compatible with the requirements of the protection of environment, extensive production, and the maintenance of the countryside' (ÖPUL), was introduced as a mean of implementing the AES as accompanying measures. The content was however already introduced in Austrian law through the Agricultural Act of 1992, and measures aiming at the stabilization and the improvement of the environmental situation met high acceptance within the Austrian society – even long time before the accession to the EU. From the 1980ies, Austria became known because of the development of the concept of "ecological and social agricultural policy". It was parts of that concept that was introduced in the later European Rural Development Policy. By 1992, existing AESs were integrated into one program, and converted into ÖPUL as part of the accompanying measures in the scope of Austria's entry to the EU. This supplemented the option to maintain subsidies to farmers while prize support was out phased which were the main motivations for implementing the RDP (Oreade Breche, 2005).

The ÖPUL-program offered a broad variety of measures. That allowed the majority of farmers to participate. From the beginning, the participation was fairly high for two reasons (Oreade Breche, 2005):

- The 'basic advancement' offered many farmers a basic start into AESs without strong environmental requirements. In that way their fear of environmental policy was reduced and simultaneously many farmers (at first) developed a stronger consciousness for environmental issues. By 1998, farmers were forced to deal with those issues intensively, since the basic advancement was by then only offered in combination with other and more ambitious AESs.

- Since larger parts of Austria have been cultivated extensively for generations, the restrictions concerning the intensity of land use above the basic advancement stated in several measures remain rather small. This is particularly true concerning the cultivation of grassland.

Due to lower natural productivity (losses in yields) in grassland areas, measures stipulating higher environmental requirements are predominantly offered in these areas. The participation in AESs in a combination with the premiums offered by the Less Favoured Areas-Program provides many farms with a higher degree of economic stability compared to farmers not receiving the subsidy. Land use practices in terms of mowing of steep slopes and the cultivation of alpine plots would unlikely continue without AESs. In those particular cases, the premiums gained from the participation in the ÖPUL-program stimulate the maintenance of endangered farming techniques as „top-up remuneration"(Oreade Breche, 2005).

The first agri-environmental measures found high acceptance by farmers because they were directed more to income objectives than to environmental targets.

In Austria, the distribution of expenses to measures between the first and second pillar of CAP is about 1:2. The European average is about 6:1. This reflects the political intention to expand agri-environmental policy. Moreover, it was an occasion to compensate farm income losses following the Austria's' accession to the EU. In 2002, almost75 % of all Austrian farms participated in the ÖPUL-program (136.000 farms). By then, the program covered more than 2 mio. ha (without consideration of alpine areas). This is equivalent to

more than 88 % of the UAA. This places Austria in the top position in concerning AE-policy in Europe (Oreade Breche, 2005).

This high level of participation, as well as the high percentage of expenses distributed for pillar II measures has been maintained in 2007. In addition it is observed that by 2007, 72 pct. of the pillar II expenditures are used under axis 2 (AES). Increase to the amount of compulsory modulation is however rejected, mainly because it is linked to increased co-financing from the national budget

By 2007 there was a change in ÖPUL due to implementation of Cross compliance. Several actions financed by schemes under pillar II, were phased out and financed through pillar 1 of the CAP as cross compliance requirements. An additional challenge in Austria has been the phasing out of milk quotas. Apparently the milk quotas have had a significant role in maintaining agricultural production in less favoured areas. This has potential consequences to economy, employment, current level of food production, and tourism linked to attractive landscapes. A reaction to these problems is a reformulation of part of the RDP by 2010 towards restructuring of the dairy sector.

The Austrian Ministry of Agriculture, Forestry, Environment and water management (BMLFUW) is responsible for organisation and strategy. The policy is defined in the Austrian National Strategy Plan (NSP) for Rural Development and a single Rural Development Programme (RDP) covering the whole country. It aims to deliver multi-functional, sustainable and competitive agriculture and forestry in thriving rural areas. Representatives of agricultural trade association PRAEKO (Praesidentenkonferenz der Landwirtschaftskammern) influenced the planning of former and current programs. PRAEKO is an umbrella group of the Chambers of Agriculture. Monitoring data and evaluation results of past evaluation periods have been used for programs improvement. In addition the following actors are involved in discussion of the strategy for rural development: Austrian Provinces, Chamber for Agriculture, researchers (biologists and ecologist involved as regards to environmental concerns providing advise), Agrarmarkt Austria, and agricultural cooperatives (Oreade Breche, 2005).

12.2.2 Description of the Administrative structures for AES (over time)

ÖPUL is an AEP offered nationwide. Only few specific measures are related to designated areas. The Ministry of Agriculture is the overall responsible for planning and processing of the ÖPUL, however, the Chambers of Agriculture, and the Agrarmarkt Austria (AMA) are involved in the implementation of ÖPUL as well.

The regional Chambers of Agriculture are the primary contact address for farmers, and responsible for (Oreade Breche, 2005):

- providing and spreading information on various measures of CC and the ÖPUL to farmers and other stakeholders (individual consulting)
- acceptance of applications, and first plausibility checks
- forwarding applications to Agrarmarkt Austria.

Processing of the applications is performed by AMA, who is responsible for the professional control of the applications, the calculation of premiums, their redemption, control (systematic and in situ) etc. The procedure is illustrated in Figure 6. Sanctions are imposed in case of an infringement against an AES contract. Sanctions reach from an admonishment to a shortage of premiums, the reduction and stoppage

of payments, and the reclaim of payments received. As for the local implementation of ÖPUL measures, the local communities play an essential role and there are 'independent' institutions (researchers) that help farmers to operationalize the various measures (Oreade Breche, 2005).

Figure 6. Planning and processing of the AE program (Oreade Breche, 2005)
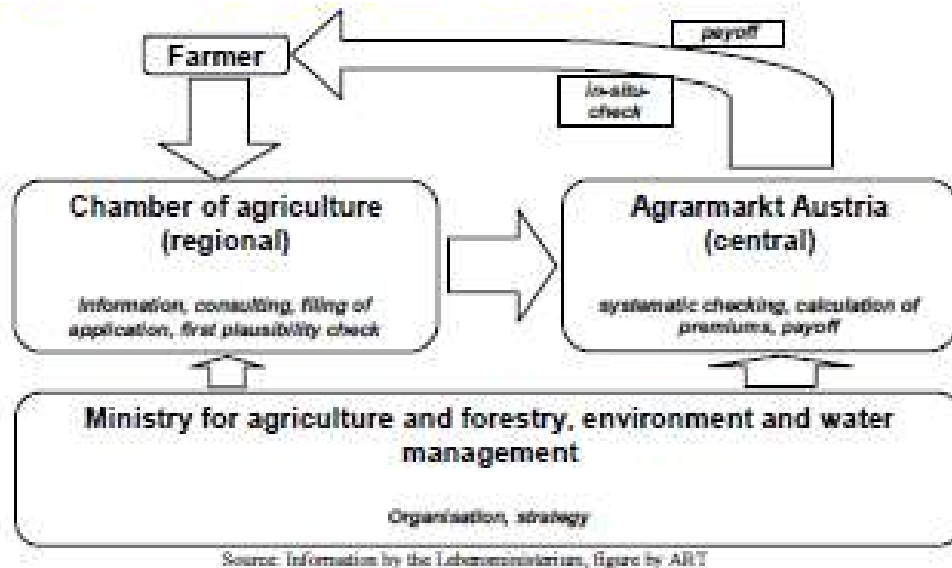
12.2.3 Observed (institutional) barriers to AES

Increase in the amount of compulsory modulation is rejected, mainly because it is linked to increased co-financing from the national budget

In intensively farmed areas farmers perceive measures as counterproductive to daily agricultural practises.

In some cases there is little engagement on the part of communities. This is to say that political willingness is required for further fostering the implementation of AES.

In these areas, there is a wish to establish "an amelioration of low threshold services that foster an active co-operation between farmers and experts making visible and understandable what both farmers and the environment could gain from agro-environmental measures"

12.2.4 Outputs/Impacts

Good impacts have been observed in terms of slowing down land use changes in remote areas of Austria, particularly in hilly, mountainous areas.

12.3 Greece

12.3.1 Description of the transposition

Since the 1950s Greek landscapes have been under influence of agricultural intensification, infrastructure development, rural-urban migration, and modernization of everyday village life, all with negative impacts on the Greek countryside. Accessing the EU in 1981, Greek agriculture was first of all became eligible to support levels, however a negative influence was the decrease in production levels and competitive advantages, which was decreased particularly by the accession of the former eastern European countries. Family farms are significant among agricultural holdings and agricultural policy has largely had environmental as well as social purposes. On this background, handling small size farms and farm modernization has been one of the main tasks of the first Rural Development Programs. Recently, the most important perceived rural problems have however changed to pollution of ecosystems and the environment, soil erosion, fire hazard, and waste disposal. These problems are however still perceived as partially caused by the existing farming structure, ownership structures and age of farmers, intensive farming, and level of knowledge and consultancy among farmers. Greek agriculture has benefited more than any other sector of the Greek economy from the accession of Greece to the EC/EU. The implementation of the CAP on Greek agriculture has also brought about a number of negative results, i.e. distortion of the composition of agricultural production, isolation of farmers from the market forces, and continuous increase of the deficit of agricultural balance of trade. As for the future, a possible way out of this national crisis is to focus on production of better quality products, which are favored from climate conditions, and towards increased application of environmentally friendly farming.

Agri-environmental schemes (AES) have been implemented in Greece since 1993. In the first period 1993-2000 Greek authorities elaborated a "National Framework Program for the Implementation of the Reg. (EEC) 2078/92 in Greece" (Oreade Breche, 2005).

According to an independent evaluation of AES (Oreade Breche, 2005), the program was mainly designed from the YPGE (Directorate of Spatial Planning and Environmental Protection). In addition, contributions came from the Directorate of Agricultural Development of Prefectures, NGOs, farmers' unions, Universities, and research institutes, who participated in initial program proposals and parts or the overall planning of specific programs. The final planning was however done by the YPGE. In addition a close collaboration with the Ministry of Spatial Planning, Environment and Public Works (YPEHODE) especially for the ecologically sensitive areas, NATURA 2000 areas and the nitrate vulnerable zones is described.

In the first programming period, a list of more than 20 measures was implemented as part of the policy that was later turned into the RDP. In December 1994 three programs were submitted to EU authorities for approval (Oreade Breche, 2005), these included the:

o The horizontal program of organic farming,
o The zonal program to reduce nitrates pollution of agricultural origin at the plain of Thessaly,
o The horizontal program of protection and conservation of biodiversity and genetic diversity,

In addition, a program of long-term set aside was submitted by January 1995.

In June 1995 a program for protection of biotopes of high significance according to the habitats directive (Dir. 92/43/EEC) was submitted but eventually the program was not approved.

Upon approval by the Commission, the programs were applied through Ministerial Decisions. The level of payments set according to a classification of crops (intensive, extensive, olives, vines, arboriculture, etc.), category of livestock, and location in environmentally sensitive areas. The latter areas were classified with higher payments, compared to the conventional areas.

The horizontal program of organic farming was approved in 1995, and holdings already under the inspection of certifying organisations were favoured, together with holdings in NATURA 2000 candidate areas, holdings placed at locations with water (lakesides, riversides and seaside areas), holdings located on islands (with exception of holdings placed on plains on Crete and Evia) and mountainous and semi-mountainous areas above 200 m altitude. If no uptake was registered, the areas on the plains would be eligible for support from the beginning of 1997 (Oreade Breche, 2005).

The program was enhanced by 1999, and every prefecture became eligible for 200 ha of agreement area that could be distributed according to a regional/local Program. This program was planned and elaborated by the prefecture authorities (Directorate of Agricultural Development of the Prefecture). Still, the Ministry of Agriculture (Directorate of Spatial Planning and Environmental Protection) was responsible for the final approval of the prefecture's program and the elaboration, implementation and administration of the overall organic farming program (Oreade Breche, 2005).

The zonal program for reduction of nitrates pollution at the plain of Thessaly was implemented under national responsibility by 1994, and was approved in 1995. Participation required implementation of an Environmental Management Plan elaborated by agronomists and 5-years contract, according to which: cotton should be rotated with cereals, the quantity of nitrogen fertilisers should be reduced below specified reference levels, the number of fertilizer applications should be raised above a reference level, easily water-soluble fertilisers should be used and drip or sprinkle irrigation systems should be applied. Elaboration, implementation and administration of the program were under the responsibility of the Ministry of Agriculture (DSPEP).

The horizontal program for long-term (20 years) set-aside comprised two measures (Oreade Breche, 2005):

- Measure A: Creation of biotopes and eco-parks focused on areas of ecological interest (NATURA 2000 candidate areas, areas of ecological interest and areas of significant ecological degradation)
- Measure B: Protection of aquatic resources from pollution of agricultural origin (riversides, lakesides and seaside areas).

In addition, a horizontal program of protection of rare breeds of farm animals was approved in 1997.

In the subsequent programming periods the RDP has developed, and the priorities have changed. In the 2000-2006 program the following priorities were given.

1. Early retirement to encourage young people to take over holdings, to encourage the formation of larger holdings and to combat rural depopulation.
2. Allowances in Mountain and Less Favored Areas (LFAs), in lands with natural disadvantages, to help maintain their level of population and to promote their sustainable development
3. Agri-environmental measures to promote environmentally-friendly farming methods, improve the upkeep of the countryside and preservation of its biodiversity, through a range of measures providing additional income for farmers.

4. Afforestation of agricultural land to meet the costs of afforestation and allowances to offset the loss of income arising from the planting of trees on agricultural land.

The rural development policy of Greece is implemented through the Rural Development Program 2007-2013 (RDP), focusing on the following within the four mandatory axes:

AXIS 1 "Improvement of the Competitiveness of the Agricultural and Forestry Sector": promotion of knowledge and the development of human resources (professional training and advising); support of new farmers, through early retirement of farmers and agricultural labourers (from the age of 55-63 years old, in order to be succeeded by new farmers/ labourers younger than 40 years old); use of agricultural consulting; modernization of agricultural holdings; increase of value for agricultural and forestry products and improvement of infrastructures; re-allotment of land, agricultural electrification, improvement of access in agricultural areas; restoration of damages; and improvement of product quality and promotion actions.

AXIS 2 "Improvement of the Environment and the Countryside": preservation of biodiversity and the development of agricultural and forestry systems and traditional rural landscapes, rational management of water quantity and quality, and soil protection and sustainable management. There were, thus, measures for remote and marginal areas (apart from uplands), measures to support NATURA areas, as well as measures for afforestation of agricultural land and for agri-environmental subsidies. Those subsidies included organic farming and stockbreeding, intensification of stockbreeding, protection from nitrate pollution, wetland protection, maintenance of threatened indigenous animal species, protection from erosion and maintenance of extensive crops, promotion of agricultural practices for the protection of wildlife, long-term pause of agricultural holdings, protection of the Amfissa Olive Grove, and conservation of viniculture of the island of Thira.

AXIS 3 "Quality of Life in Rural Areas and Diversification of the Rural Economy": reviving economic activity, mainly in the mountainous and semi-mountainous regions of Greece, via the support of entrepreneurship and diversification in rural economy, basic infrastructure provision, promotion of education and acquisition of skills, conservation and upgrading of the rural and cultural heritage and improvement of information flow. Specifically, there was an encouragement of tourism activities, provision for primary services for the economy and the rural population, renovation and development of villages and actions for the conservation of agricultural heritage.

AXIS 4 "Implementation of LEADER Approach": contribute to the reinforcement of the endogenous potential of rural regions, by applying the bottom-up approach to rural development to improve entrepreneurship, innovation, and diversification of the rural economy.

The programs after 2000 builds on the achieved experiences from the first program described above, and almost all agri-environmental programs are now designed by the Hellenic Ministry of Rural Development and Food, still with some contributions from Directorates of Rural Development of Prefectures, NGOs, Local Action Groups/ Development Companies (S.A.- e.g. http://www.anel-sa.gr/index.php?lang=en) managing agri-environmental programmes, farmers' unions, Universities, and research institutes.

12.3.2 Description of the Administrative structures for AES (over time)

Different actors are involved in the planning and implementation of the AES at national, regional and local level (Oreade Breche, 2005):

- The Ministry of Rural Development and Food and the Directorate of Physical Planning and Environment has the responsibility of the AES planning.
- Regional Rural Directorates

The responsible authorities for the management of rural development are mentioned below:

- The implementing agency is Special Application Service of the Rural Development Programme - Competitiveness of the Ministry of Rural Development and Food.
- The implementing organizations are the relevant Directorates of Rural Economy of Elected Regions to award implementation at the regional units.
- The management body, is defined as the Managing Authority of the Rural Development Programme
- The payment is handled by the Control Agency Community for Aid Guidance and Guarantee Fund (OPEKEPE).

As concerns the rules of public information and dissemination, the farmers are informed through the Program website, the Ministry of Rural Development & Food Enforcement Bodies, the local Farm Directorates, posters and press releases and general publicity campaigns, especially through the Internet and by Payment Authority of Common Agricultural Policy (CAP) Aid Schemes. Improvements were observed over earlier procedures that had been followed in the past, such as briefings by specialized media, by agricultural scientists, etc. As a result, the success of dissemination of information derives from the large number of applications for aid. However, even in the case of a low number of aid applications, lack of information was not considered to be the reason.

The different groups taking interest in the policy area (other than farmers)are mainly citizens, farmers and Farmers' Co-Operations, ecologists/ environmentalists and green NGOs. There is usually not a formalized dialogue with actors and stakeholders. Since 2009 there is an Open Government Initiative (http://www.opengov.gr/home/) and there are some meetings organised by the Self-Government but not enough and not efficiently targeted and correctly/ adequately spread though the different actors and stakeholders. Sometimes, there are other institutions attached to the implementation process, e.g. institutes, consultant offices, Farmer's Unions (or Union of Agricultural Co-operatives), Local Development Agencies S.A. (i.e. Leader implementation).

In earlier implementations of the AES (reg. EC/2078/92), the role of intermediate consultants or lobbies between the farmer and the central administration (state) was essential in schemes development. Consultants or lobbies showed significant activity towards the implementation of certain AES in order to try to influence the final measures (Oreade Breche, 2005). In these cases a high rate of implementation registered, likely due to diffusion of information to farmers and sometimes pressures to the public regional authorities for better implementation. Within regions, there have been observations of significant differences between neighbouring directions on the uptake. Likewise, it has been reported that only where there has been a intermediation between farmers and the regional or central administration authorities, the AES implemented under EC/2078/92 are observed to be active and early implemented (Oreade Breche, 2005).

12.3.3 Observed (institutional) barriers to AES

In the first programmes there was a lack of skilled labour related to environmental issues in agriculture in the directorates and regions. The lack of personnel at all levels remained a major factor explaining delay and low degree of implementation of AES in Greece until intermediate evaluation of 2000-2006 RDP, and this remains an issue.

In addition, the current biggest problem is the lack of co-ordination between the different bodies/ services (a general lack of communication between public bodies at national, regional and local level).

Many of these problems may have occurred because the Directorate had presented a general approach to most agro-environmental problems and agro-environmental policy of EU, without knowledge of the implementation of agri-environmental policy in other EU member states and with no experience in projects' design and implementation according to EU agri-environmental legislation. The opportunity of diffusion of knowledge and experience on AES design and implementation was not used up to 1999.

In the early implementation, a barrier was the lack of an existing national standard and efficient network of monitoring of the effects and impacts of agricultural activities in natural ecosystems (e.g. in rivers, river deltas, etc). This was among others caused by the fact that Greece was not able to cover the states' contribution for the expenditures for the establishment and implementation of a monitoring (Oreade Breche, 2005).

It is mentioned that in the past a conflict between several authorities and the beneficiaries caused major administrative problems with the characterisation of eligible areas in terms of pasturelands and woodlands and therefore the eligibility to certain AEs and control of activities negatively affected the implementation of certain AES of RDD 2000-2006. In addition beneficiaries, farmers' unions and regional public services, considered the AES according to EC/2078/92 procedures as too bureaucratic for the average farmer, requesting significant paper work and collection of documents (Oreade Breche, 2005).

However, the main threats are considered to be extraneous to the RDP: the emerging economic crisis affecting the production, the prices and the long-term rural policy of EU, the exhaustion of natural resources, the lack of spatial planning, the lack of counter urbanization and the continuous depopulation of distinct, disadvantageous and marginal areas.

In connection to the recent program, barriers are identified in terms of a centralized implementation system that needs major changes and adoptions in the entire system. These changes include:

- Reduction in legal and administrative obligations like permissions, certificates and other documents or controls which may be not necessary.
- Avoiding peak periods by deadline-calls.
- Establishment of central integrated database with all information should be designed for saving and "filtering" all information derived from any document. This will decrease bureaucracy in the stage of implementation and improve data collection for evaluation needs.

In addition, institutional learning, capacity building and networking at all stages would help in the better utilization of past experience in order to improve current and future rural development policy design, implementation and evaluation.

Forces however also require increased responsibilities of regional and mainly local authorities and

stakeholders involved in rural development and public policy because they are the ones who are directly influenced by those measures. They should have the feeling of "ownership". Communication among actors is also very important. The National Rural Network could play a crucial role for a more effective communication at national and EU level.

Incentives for greater participation should be provided for all actors who are involved and affected by Rural Development Programme in the countryside in order to achieve a more integrated Regional Development. Farmers lack information and policy networks while the existing mechanism for facilitation of policy implementation e.g. the Local Action Groups for the Leader program, have not been involved in agri-environmental policy process.In addition, when the central strategy accords with the lower-level policy, measures tend to be promoted by the regional and local authority (prefecture/municipality). When the planning authorities and services of the central government do not ask the regional or the local authorities for advice in their design of measures and strategies, then the central strategy cannot be implemented regionally and locally or (in the cases that could be implemented) it does not help the overall aim of the strategy. In general the following barriers are identified:

As concerns the factors that influence the success or failure of the implementation of the schemes in the 2007-2013 program, they are reportedly associated with:

1) The appropriate planning/ selection of AE measures to tackle respective problems (avoid single measures to achieve multiple goals, strategic planning is too 'Athens-based', no utilization of decentralized expertise in e.g. prefectures)
2) The administrative procedure and skills among managers/staff, frequency of change in managerial procedures, and coordination between central government and local administration.
3) The monitoring and evaluation system of the environmental effects from the implementation of agri-environmental measures (Lack of control of product outputs in terms of quality and quantity).
4) The amount of support of from the ministry.
5) The level of awareness and knowledge among farmers.
6) Increased access to public agricultural consultants
7) The amount of information on the grants which was initially inadequate, but has shown some improvements in the couple of years.
8) Problem with isolated agreement areas in a matrix og non agreement area, particularly when it comes to organic farming
9) Orientation of measures towards fulltime farmers, has a negative impact on continuity

12.3.4 Outputs/Impacts

Information on the Greek case shows an overall good level of implementation in terms of output indicators (uptakes), i.e. there are many recipients of subsidies, and large areas are covered. There are however no special land use change in the countryside. Even though there are many recipients of subsidies (full and part time farmers, hobby farmers and non-farmers who own agricultural land), in many cases they do not use their subsidies in order to improve their production (either in terms of quality or quantity). The effect of the measures is likely in the form of preservation and maintenance rather than improvement, and improvements are difficult to document over a short time-span.

An example of subsidies in olive farms: Considering the average less-than-10-stremmas olive farms, most of the subsidies are really small and usually not enough even for their own olive farm conservation (deplantation, cleaning, lopping, etc). Perhaps only some big landowners of organic olive farms (getting the organic farming subsidy and the quality deduction subsidy) and some stock-farmers with hundreds of sheep and goats can be really supported by subsidies scheme. However, during previous years (1985-1990's), there were satisfactory subsidies for olive oil production, depended on olive oil quantity and quality. For example, in some agricultural areas for a big landowner of 40-50 stremmas (16-20ha) the production could be half of an average month salary of that period.

As a consequence, Greece had traditionally a positive agricultural balance of trade, which turned to negative after the accession. Greece turned into a deficit country in agricultural products as a result of the freeing of imports from the other member countries (inability to produce cheaper and better quality competitive agricultural products). For fruits, vegetables and wine Greek producers was likely to face an increased competition into the EU markets.

Undoubtedly, the implementation of the AES -such as the fallow, the measure of protection from nitrates, etc. imparts a positive contribution to environmental and landscape protection. To begin with, AES are considered to have no effect on landscape change, but to maintain or restore it. On the other hand, the type of production is guided by grants. As a result, dependency from specific crops grows and loss of the production variety ensues. Other problems that were identified were the planting of alien species, bringing about changes to the landscape and to biodiversity. In other cases, contradictions were identified in measure implementation in neighbouring areas, as is the case of the Forest of Dadia. In the latter protected area, there were grants through the LIFE Program for the creation of forest openings, while, outside the protected area, there were grants for afforestation.

12.4 Romania

12.4.1 Description of the transposition

The transposition of the CAP's pillar two has gone through several stages since the fall of the communist regime in 1989. Large reforms have been carried out in order to get institutions in place in order among others to become member of the EC. The steps in brief include:

o   ->2000: Restoration of land ownership, develop land market, develop legal conditions to stimulate association of subsistence farms to production farms
o   2000-2006: transpose EU CAP policy objectives to domestic policy, develop institutional and regulatory frameworks to implement CAP
o   2007: Structural development, while preserving cultural heritage and rural landscapes (+ food quality, biodiversity (Directives), training and education).

During first phase of land reform, the approach was sectorial and the Ministry of Agriculture was in charge for policy elaboration and coordination. The main tasks were to recreate private landownership, and to create decentralized and market based governing systems.

In the second phase, the goals were to reformate agricultural land owner structure in order to create functional farms, and market for land rental and transactions, and credits/mortgage. On this background, the intention was

• Transposition of EU-CAP policy objectives, mechanisms and standards, into domestic policy for land and rural reform, aiming to create a significant level of compatibility and competitiveness with that of EU countries.
• Development and consolidation of specific institutional and regulatory frameworks and capacity (including farmers and administration) for implementing CAP objectives, and financing programmes and mechanisms.

Several instruments were available. SAPARD acted as a primer of support and building on institutional experiences, and SAPARD has been available to a wide range of pilot micro-projects dealing with all kinds of aspects of the land reform and rural development, clustered in 4 groups (axis) in the NPRD/2000-2006, and to micro-projects dealing with the development of organizations, institutions and capacity (administration, farmers and other rural agents) which have to allow the implementation the post-accession programmes.

Additional capacity building for use of agri-environmental measures and the EU-Life-Nature Programme has been available.

The National Strategy for Biodiversity Conservation and Action Plan (NSBC-AP)/ 2000-2010 might be also be viewed as an important policy instrument in the field of restoration and conservation of habitats.

These experiences were combined with domestic reforms and market instruments (e.g. tax reduction for land transaction, agricultural credits, state guarantees for agricultural credits, subsidies for biodiversity conservation and organic farming). These were tested and adopted, as well as training programmes, technical assistance and dissemination of good practice and information.

Currently, the RDP is produced with Ministry of Agriculture and Rural Development leading cooperation with the Ministry of Environment, Water Management and Forests. The RDP is made in process with scientific panels, "Scientific and Technical Advisory Councils", inter-ministerial cooperation, "Inter-ministerial Committees", stakeholders: NGO's incl. public and private sector, CDA and MA implementers with regional and local cadastral offices and ANCA. The implementation of agricultural policy and programmes, with their very specific objectives and targets, is the responsibility of the "County' Directorates for Agriculture" (CDA) in cooperation with the county and municipal administrations, regional and local "cadastral offices" and new established "Agency for Technical Assistance in Agriculture" (ANCA/1997).

The advisory bodies have a broad composition, including not only scientific and technical experts, but also representatives of NGOs and other stakeholders from public and private sectors. Involved stakeholders are representatives from farmers to local and county councils, private business working in infrastructure development. This kind of approach and arrangements started to be applied in the pre-accession phase and slightly improved during post-accession phase.

The attractiveness for farmers was in the first place the compensation of their incomes.

12.4.2 Description of the Administrative structures for AES (over time)

The Ministry of Agriculture and Rural Development has the leading role for coordinating the rural development policy and programmes. From the political and legal perspective it is has to established a strong and effective cooperation with the Ministry of Environment, Water Management and Forests which has the leading role in policy and programmes elaboration and coordination for environment, water and forests.

Until the late 1990ies the implementation of agricultural policy and programmes, with their very specific objectives and targets, was the responsibility of the "County' Directorates for Agriculture" (CDA) in cooperation with the county and municipal administrations, regional and local "cadastral offices" and new established "Agency for Technical Assistance in Agriculture" (ANCA/1997).

Several new specific institutions have been created - starting late 1990ies for the implementation of the RDP. Their activity consolidated and extended in the pre-accession/2000-2006 and post-accession/2007-2013 periods, but no major change took place from the 2000-2006 program to the 2007-2013 program This new institutions include the:

- Agency of Payments and Intervention in Agriculture (APIA) in charge for technical and financial implementation of European funds (European Agricultural Guarantee Fund – EAGF and EAFRD). APIA is the responsible unit for the implementation of direct payments schemes for agriculture with finances from the EAGF, EAFRD as well as the national budget.
- National Agency for SAPARD, with regional offices (in charge of SAPARD implementation)
- Agency for Administration of State owned land (ADS);
- National Agency for Fishery and Aquaculture (NAFA) in charge for policy implementation regarding conservation and management of aquatic resources;
- Agency of Payments of Rural Development and Fishery in charge for technical and financial implementation of the EAFRD);

- National consulting and Training Agency.

Respondents' assessments show that distribution of roles and responsibilities for compensatory payments/ subsidies allocation were adequate. The responsibly for the final decision regarding the subsidies allocation needs to be and is decentralized.

The successful implementation of the support schemes for farmers is achieved through the Integrated Administration and Control System (IACS), which assures a complete management of area payments for farmers, from national and European funds. The IACS components are targeted to manage payment applications from farmers and to ensure the accuracy of the reported information, as well as to comply with the requests of payment schemes and support measures.

12.4.3 Observed (institutional) barriers to AES

Local authorities' respondents consider that transfer from pillar I to pillar II (Modulation) did not grow due to non-allocation of funds from national annual budgets (limited funds are available due to the financial crisis). Therefore the EU funds were not fully used.

The main barriers in the vertical coordination derived from insufficient *professional competence* and from the malfunction of a real monitoring programme with feedback effects. A new monitoring strategy based on feedback analysis is needed in order to support development of current measures useful for biodiversity conservation.

The personnel involved in the decision making process must be maintained at a certain critical level of competence and trained periodically. Regardless of the level of decentralization for implementing and monitoring of the targeted measures, the vertical coordination needs to have a flexible and strong framework.

The young institutional infrastructure constructed in the late 1990ies, and in charge of implementing the CAPs programme and operational tools, into domestic rural policy, programme and operation has shown a significant vulnerability against political, social and economic disturbing factors, and consequently low level of operational capacity.

Since EU-CAP has been recently implemented in Romania, there is a low level of awareness related to agri-environmental schemes and measures. Despite the efforts of the Ministry of Agriculture and Rural Development to inform farmers about agri-environment scheme through debates, leaflets, guides, available funds have not been used to the full extent.

Difficulties in correctly identifying the land parcels due to the many mistakes in establishing propriety rights and demarcation of parcels, as well as the lack of the cadastral maps, especially in the areas that was not in co-operatives regime.

Uptakes are low due to the aged farming population and their reticence on applying for agri-environmental measures.

Because certain measures are only applied in specific areas delineated in the NPRD, uptakes are likely to be low.

Economic recession and low capacity for co-financing the projects;

Political and social instability;

Institutional vulnerability and bureaucratic procedures;

High rate of migration, especially young people from rural area.

Lack or weak motivation of land holders of very small (< 2 ha) and small (< 5 ha) pieces of land to adopt and implement the CAP measures and standards;

Lack of capital and knowhow by owners of subsistence and semi-subsistence farms;

Low capacity of specialized bodies e.g. National consulting and Training Agency in Agriculture in charge to provide technical assistance to farmers;

High cost of the land transactions and credits, or serious distortion on land rental market (eg. many contracts which were not legally notified and consequently not respected by large corporate farms).

12.4.4 Outputs/Impacts

In general there is no estimate of landscape changes as consequence of the AES implementation so far:

Application of the agri-environmental schemes helps the protection of the biodiversity through application of the good agricultural and environmental conditions that need to be fulfilled by farmers in order to receive direct payments. Their implementation does however not result in landscape changes.

The occurred landscape changes are due to operating parameters and maintenance.

The landscape changes were not a consequence of agri-environment schemes.

A major measure for biodiversity conservation and for important landscape changes in the plain areas could be the afforestation of the agricultural lands, especially the establishment of the green belts.

Fragmentation of agricultural land into so many small or for subsistence exploitations together with unfavourable age structure of farmers population, and lack of capital and expertise have been further accompanied by large (1-2 mill. of hectares) area of abandoned land.

It is estimated that structural development in the past 20 years has contributed further to preservation, through a large surface of "abandoned" land within the structure of agricultural landscape, and the implementation of first set of agri-environment projects, combined with prevalence of the non-intensive agriculture (based on traditional practices). It is concluded that during entire pre-accession phase the conservation of habitats and biodiversity, and protection of environment have been some of the most important beneficial effects.

However polarization of the effects of land policy objectives and programmes implementation, reflected by fragmentation, extensification and low crop productivity of the farm system, on the one hand, and by conservation of habitats and species, and protection of the environment, on the other hand, was the most challenging phenomenon, during first and second phase of land and rural reform.

12.5 Denmark

12.5.1 Description of the transposition

The history of agri-environmental schemes (AES) in Denmark can be divided into several time periods: 1990-1994, 1994-1996, 1997-2006, 2007-2010 and 2010-2013. A brief overview of the first periods is given in the table below (Table 14). The description mainly concerns the geographically targeted measures; since they constitute the original regional MFO-programme (voluntary accompanying measures established and initialized under EEC 797/85). The horizontal measures except measures for organic farming were implemented later.

Table 14Overview of the historical development of the agri-environment measures. In Denmark Nature and Environmental objectives are mostly seen as two different issues. Environment objectives concern pollution aspects and nature concerns the protection and maintenance of habitats and biodiversity (Oreade Breche, 2005)

	MFO 1990-94	MVJ I 1994-1996	MVJ II 1997-2004	MVJ III 2004-2006
Objectives	Nature, Landscape and environment	Environment– with optional use in connection to nature.	Environment– with optional use in connection to nature.	Nature and Environment
Implementation	Counties: Geographical targeting Processing of applications Information Payment	Counties: Geographical targeting Got their own programmes by 1996 DFFE: Processing of applications Information Payment	Counties: Processing of applications Geographical targeting Information Payment DFFE: Approval Control Payment	Counties: Processing of applications Geographical targeting Information DFFE: Approval Control Payment

Source: (Kristensen 2003)

The first implementation of the AES in 1990 focused on habitats (including biodiversity), landscape and the environment. The programme was called MFO-ordninger (MiljøFølsomme Områder = Environmentally Sensitive Areas). The measures were designed regionally and implemented and administrated on a regional basis by the counties. Compared to the targets (26.000 ha), uptakes were not fully achieved (24.000 ha).

By 1994 the MFO-measures were replaced by the - MVJ-measures (MiljøVenlige Jordbrugsforanstaltninger = Environmentally Friendly Farming), these measures were the Danish implementation of EEC 2078/92. The replacement caused major changes in the institutional competencies and a centralisation of the design and administration of the measures. In the same process, the rather broad objectives of the MFO-measures (protection of landscape, nature and environment) were replaced by a more narrow set of objectives aiming at extensification and protection of the aquatic environment against pesticides and nutrients. By the centralization of the administration, the measures became the task of The Directorate of Food Agriculture and Fisheries (now The Danish AgriFish Agency, Abbreviated DFFE/FERV in this text, depending on the time) under the Ministry of Food, Agriculture and Fisheries (former Agricultural Ministry), however, the designation of geographically targeted areas was still a duty of the counties (Oreade Breche, 2005).

The 1994-1996 program included both geographically target measures and horizontal measures. In this period the counties' technical influence increased. Additionally, the Association of Danish Counties ("Danish Regions") applied for EU co-financing of a county program. This was approved by the commission in 1996 and offered to farmers first time in July 1996. As a result, two different programs were running – the program of DFFE and the County Programme. Designations for the targeted schemes and the location and content of signed agreements reveal a concern for nature and landscape as well as for protection of the aquatic environment (Oreade Breche, 2005).

From 1997-2004 the influence of counties increased further, and by 1997 they became responsible for approval and payment for targeted measures. The RDP (the implementation of ECC 1257/99) was designed and approved by the European commission (EC) in 1999-2000. By then, the objectives were slightly changed to include both the protection and improvement of the aquatic environment and nature (biodiversity) especially in environmentally sensitive farming areas. The protection and improvement of the aquatic environment was however still the main objective. All measures were implemented in one programme, but the administration was shared between DFFE and the counties. The counties were responsible for administration of the targeted measures and DFFE was responsible for the administration of the horizontal measures. The numbers and the content of measures were dynamic during the period. For all types of measures, the final approval of agreements and payment was conducted by DFFE in the period 2000-2006. By 2004 the objective considering nature/ biodiversity was prioritized, and agreements in Natura2000 areas were favoured compared to agreements in ESA (Oreade Breche, 2005).

By 2007, the distribution of administrative tasks was again changed and centralized as an element in the structural reform. This was mainly due to an expensive administrative practice in the counties, and requirements from EU. After the structural reform in 2007 in which government on the regional level was abolished, the remaining responsibilities were divided between the local authorities (municipalities) and the Ministry of Environment (MoE).

The responsibility for the area-based measures concerning agri-environmental measures, implemented through the Rural Development Programs, is today solely implemented by the Agri-Fish Agency (AFA) under the Ministry of Food, Agriculture and Fishery (MFAF), where the process of applying for subsidies is handled electronically. The afforestation program is however handled by the Nature Agency under MoE. The implementation of the Habitats Directive and the N2000 plans are the responsibility of the Nature Agency,

The process of formulating the programs are quite extensive – not least for the other axes of the program, while for the environmental part, it is mainly agricultural associations, green NGOs, and Local Government, being an interest organization for the municipalities, that take part in the hearings. Before the creation of the RDP 2007-2013, there was a broad process of involvement that took place in workshops around the country, while the revision in 2009 reflected a centralized non-involvement process. The interviewed representative from the non-governmental agricultural organization (NGAO) states that during the formulation of the Green Growth strategy (2009), stakeholders were excluded from the process, and subsequently the RDP was revised according to this strategy - focusing the EFA measures mainly on the Natura 2000 implementation and less on the environment (water).

Very little focus had been on the nature before, in the agri-environmental policy, but this was reversed with the Natura 2000 plan. On the contrary, the NGAO states that the involvement from the Nature Agency

through the Green Progress forum is real, and that they have met great responsiveness during the Natura 2000 process. Also the NGAO asserts that during the recent years a large consensus has developed among stakeholders - green organizations as well as agricultural organizations - on the objectives and targets for the process, if not always on the means.

The coordination to the policy framework setting up targets for the effort, such as improvements in relation to the Habitats Directive and the N2000 areas requires coordination between the two involved ministries and their agencies for obtaining desired effects. According to the NGAO communication between the two agencies have not been well functioning, but has improved during the last couple of years. This organization experience however, that sometimes they are facilitators for the communication.

The role of municipalities in relation to these programs are partly as stakeholders, as they try to influence the content of the schemes, and the way they are implemented, but they have a major role as facilitators to the involvement of farmers in the voluntary schemes. According to the NGAO this role is hampered by a lack of a possibility to ask for subsidies to the facilitating part of the process, which is important for the information, and the conception of projects that need collaboration among groups of farmers.

Coordination between the MFAF and Ministry of the Environment (MoE) on the design of the schemes seems highly relevant, but there are no formalized forums for this interaction. Each of the ministries arrange for coordination forums with stakeholders - in the MFAF it mainly takes place as ad hoc meetings and workshops, while the Nature Agency (under MoE) has had an advisory group to the national Natura 2000 plan, which has now been formalized to a Green Progress forum, in which stakeholders are invited for consultations.

12.5.2 Description of the Administrative structures for AES (over time)

Implementation of the AES in Denmark has undergone several changes since the measures were originally introduced in 1990. A Particular issue has been the distribution of tasks between national and regional administrative structures. This discussion is of relevance since the forthcoming implementation of the HD, likely includes a turn towards regional or local administration or facilitation of the uptake processes of AES, in order to include the AES as means of achieving the goals set in the HD and the WFD.

Up through the 1990s the administration of the agri-environmental schemes changed several times between the Ministry of Food, Agriculture and Fishery (FVM) and the counties. Initially, the counties were obliged to designate the Environmentally Sensitive Areas (ESAs) in which the geographically targeted schemes were applicable, and to disseminate information of the schemes. From 1997 however, the responsibility of managing the schemes was delegated to the counties, while the responsibility for demonstration projects, larger projects and control were kept in the ministry. Due to an expensive administrative practice, and requirements from EU, this was again changed and centralized as an element in the structural reform.

In the process of forming the AES, participants from the Farming community and public authorities formed a working group. In this group, the public authorities included representatives from the counties (Danish regions), DFFE and PDir (Plant Directorate). After approval of the RDP the working group continued to contributed with inputs to applications for program changes. The targeted geographical areas were designed by the counties on an annual basis, using the prescriptions from DFFE. Basically three categories

of objectives for the designation exist: protection of surface water, protection of ground water and protection of habitats. The three main categories include (Oreade Breche, 2005)..

1. Catchment areas, denitrification areas and buffer zones
2. Ground water areas
3. Coastal areas, meadows and pastures in fresh water areas, habitats in dry areas, valuable landscapes, buffer zones, corridors, habitat areas

Areas were registered in one of the categories and measures may be applied according to the category.

Design and programming differed depending on the measures in question. The payment were made from the national agency, however, the regional authority had considerable responsibility in connection to the targeted measures. The national authority was however exclusively responsible for organic farming and other horizontal measures. All Control was conducted by the Danish Plant Directorate (PDIR).

Figure7 Diagram showing responsibilities of authorities in the Danish measures DFFE: The Directorate for Food, Fisheries and Agri Business PDIR: Danish Plant Directorate (source : Fact sheets and (Direktoratet for FødevareErhverv 2003) (Oreade Breche, 2005).
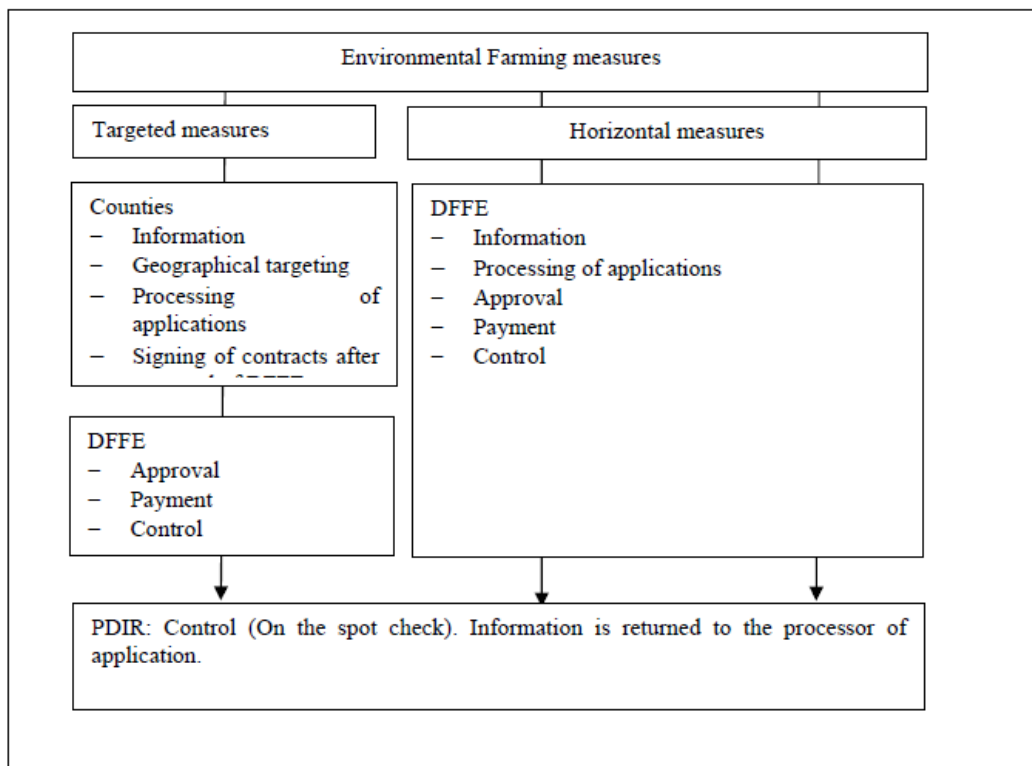
Now, the institutional setup for the implementation, follow-up and control of the policies on agricultural subsidies is centralized. The coordination in the policy framework setting up targets, such as improvements in relation to the Habitats Directive and the N2000 areas requires involvement of the two ministries (Agriculture and Environment) and their agencies to obtaining desired effects. The role of municipalities in relation to these programs are partly as stakeholders, as they try to influence the content of the schemes,

and the way they are implemented, but they have a major role as facilitators to involve farmers in the voluntary schemes.

Farm advisors have had an informal role in providing knowledge of the various measures to farmers; however this is not explicitly supported by any of the measures. According to the NGAO this role is hampered by a lack of a possibility to ask for subsidies to the facilitating part of the process, which is important for the information, and the conception of projects that need collaboration among groups of farmers. This task may also be handled by local coordinators of nature projects in order to assure that farmers get the proper knowledge and advice on entering schemes in order to obtain the correct compensations for land use changes or maintenance of favorable conditions on semi natural areas.

12.5.3 Observed (institutional) barriers to AES

In the evaluation of the RDP 2000-2006 two issues of relevance for the success and for the effectiveness of the program were raised.

One relates to the centralized versus decentralized public management of the schemes. Experiences form the Danish schemes are that the centralized model are generally more cost effective than the decentralized management (Orbicon 2008). In Denmark some of the schemes were earlier managed by the now abolished counties. It is however argued that the content of the schemes are important to consider before deciding on a model.

Another issue raised is the decision on broad horizontal schemes versus schemes which are locally targeted and with a larger and more in-depth effort. This may also be related to a concern on the role of EU subsidies. The question raised is whether the schemes are too much directed towards areas where a large co-financing can be obtained, while these schemes may imply a complex and bureaucratic management and control effort, while not always providing the largest effects for the Danish rural area development.

Also, it was questioned if a beneficial coherence among the schemes on one hand and among the schemes and other policies on the other should be addressed from above (through a strong steering mechanism) or if it should be provided from the bottom (from the users).

The NGAO views the complexity and lack of flexibility of the schemes as the main barrier to implementation. Farmers think that it is too much of a hassle to participate in the schemes, due to bureaucracy and fear of wrong-doing (which can have major impact on both the RD subsidies and the single payment subsidies). Also it was stated that there is a feeling that the Danish control system is overly strict, and lacks flexibility in the interpretation of when the farmers do not comply with the rules.

Lack of farmers' knowledge of the content of the schemes has been verified by a recent study. The NGAO thinks they use the information channels available, but also that improvements in the approach of the advisory service could be asked for.

Support for facilitating the dialogue with the farmers - either by municipalities, who are responsible for implementation of the Natura 2000 and the water action plans, mainly through voluntary agreements with farmers, or by agricultural advisors - was called for by the NGAO, and also by the LA1. This could also facilitate more collaborative projects where groups of farmers participated in a larger action.

Schemes which could compensate for production losses to e.g. migratory birds were also called for.

On the organizational side, lack of coordination for policy integration has been raised as an issue by the NGOs. The NGAO thinks that a formal forum with involvement of the two agencies as well as the NGAO and maybe Local Government, would be beneficial for the conception of improved schemes.

During the interviews the following barriers to signing of Agreements were mentioned:

- Mistrust to the system, since compensated actions may later on be included in non-compensated requirements
- Fear of the consequences of AES participation on the SPS payments (in case there are errors in the AES application and agreement, or lack of the outcomes in terms of an unintended development on the area, SPS payments may be reduced).
- To many farmers signing of an agreement may seem counterintuitive, since the farmer is asked to sign a contract to receive money for dealing with additional restrictions)
- Lack of a stakeholder who assures the information about AES is presented to the farmer (this could be a municipality representative or a farm advisor) and that coordinated initiatives involving several farmers are possible. Assuring that the advisory service is skilled in order to be able to advise on signing AES agreements
- Better compensation

From previous implementations the following barriers have been mentioned:

Agreements need to be approved by the advisory service, otherwise it will be difficult for the advisor to recommend them to the farmer and thus promote the uptake of measures. A positive advisory service promotes the use of measures.

It is preferred that the agreement horizon equal the other decision horizons of the farmer, in order to incorporate agreements with farm economy and planning.

Continuity in time of agri-environmental policies and physical connectivity of agreement areas is necessary. In many case, short obligation periods will not provide valuable results. All time horizons should be represented (5, 10, 20 years), and resigning of the agreement should be possible but optional.

Different payments complicate the measures and application. Resources are used on bureaucracy instead of bottom up planning and contact to the landowners.

12.5.4 Outputs/Impacts

The political priority has in Denmark for many years been directed towards the aquatic environment rather than the terrestrial nature quality; however nature quality has been referred to as a side effect from some of the schemes addressing the aquatic environment. The grazing schemes have addressed nature quality in meadows and dry grasslands, and the schemes reducing nutrient inputs have also to some extent served nature quality improvements. None of the schemes in the period from 1994 to 2006 did specifically address the N2000 areas.

In the RDP 2000-2006, an evaluation of the former accompanying measures was included. On the management changes deriving from the EFA schemes it is concluded that fundamental changes to land management did not take place following the subsidies, but that the up-keeping of extensive practices have taken place. Moreover, for areas which have not before been managed in an EFA scheme, considerable

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improvements did take place in the direction of extensification (RDP 2000-2006). On approximately 25% of the grassland areas full or partly change from rotation areas to permanent grassland took place. A comparison between areas with and without EFA contracts showed a considerable effect, and the final conclusion was, that the scheme had had a certain importance for the protection of nature and landscape through sustaining extensive practices, - practices which would not have been upheld had it not been for the subsidies.

The area involved in these measures was approximately 75.000 ha in 1999. This area grew in the first RDP period to 275.000 ha (approximately 10% of the agricultural land), of which 175.000 ha was under the organic farming scheme. These areas did not reach the targets in the programme, but it is difficult to quantify precisely based on the report, as some of the values cover overlapping areas, and as schemes changes during the period. The total area under the schemes did not reach the area targets set for the period 2000-2006, but according to the evaluation, a range of benefits have been derived from the program, including soil- and water quality, but also positive effects for landscape values and biodiversity.

The impacts of the organic farming schemes were also positively evaluated – especially for the farmer income, but also on nature and environment issues, including biodiversity.

The afforestation on agricultural and other land was only on 7500 ha, but undertakings included another 4500 ha, thus reaching the targets set for this type of afforestation. In combination with success in another measure directed at good and multifunctional forest management, according to the evaluation, they contribute considerably to ecological functions of the forests, as well as to local attractiveness, while economic contributions to rural development are limited (Orbicon 2008:60).

The NGAO thinks that it is not possible to identify any landscape changes related to the Natura 2000 plan, and that it is too early to expect such changes.

13 Outcomes of the study of AES across the cases and conclusions

What does the analysis tell us about implementation and institutional frameworks in terms of success of initial implementation of the measures? The below table 15 combining the transposition history with information about barriers and outcomes/impacts shows that there is a clear connection between countries who have been early movers in terms of having existing structures ready for implementation of measures and formally successful implementation. However interesting is that there is a differentiation between countries who have already had institutional structures for AES (NL, AT), and countries (DK), where the option to test AES at an early stage formed the way for future implementation of the schemes. A third observation is that countries missing the opportunity to build institutional structure that could be used for implementation of AES in the first programming period (GR) have difficulties catching up later on, even though the policy initially was quite ambitious. This includes the intended use of AES in order to support the habitat areas in the 1990ies.

Interesting for the Danish case is also how the initial institutional structure only existed for a few years, and the whole scope of the schemes was changed in the 1990's from relatively broad schemes implemented at a regional scale directed towards biodiversity and nature protection, to be focused on nitrate protection in connection with the Danish attempt to fulfil the requirements of the nitrates directive in terms of the nationally formulated Aquatic environmental action plans I-III. In this process, the institutional structure first turned towards national implementation and later on became more regional. This development was recently changed again. Organisational structures turned towards national implementation of schemes, and the schemes have been redirected towards biodiversity purposes in the Natura 2000 areas.

Romania is interesting since they have huge potentials for policy learning, i.e. how to handle implementation and facilitate a dynamic institutional framework in a future perspective.

Table 15 Transposition history

Country	Pre 85	797/85	2078/92	1257/99	1698/05	Use of AES for ND	Institutionally successfull (No significant barriers) implementation	Effective and good results/impacts
NL	X		X	X	X		X	
AT	X		X	X	X		X	X
RO					X			
GR			(X)	X	X	X		
DK		X	X	X	X	X	X	

The difference between Austria and Netherlands in terms of successful implementation and successful outcomes is interesting as well. It is claimed that the lack of outcomes form a Dutch perspective is due to the extreme intensification in areas surrounding the agreement areas.

According to the world of compliances by Falkner, several categorisations of each country could be made based on the available data. It could be stated that good compliance and results with use of the AES is obtained for Austria (world of law observance), while Netherlands and Denmark are purely examples of world of domestic policies, or, more eventhe world of dead letter (i.e. the Policy is formally adopted but with problems of obtaining the desired results, because of a lack of changed institutional patterns in the practical implementation. E.g. existing institutions or decision rules are maintained; even though formally the decisions on ratifying policies are taken, the lack of change could be because of lack of social structures supporting the decision maker, lack of advice or lack of control (inspection) (Faulkner 2008, p. 304-306)

In Denmark, domestic policies in terms of reinterpretation of AES to comply with the nitrates directive (ND), left the original intentions of the AES out of the schemes. Another interpretation could be that Denmark is a representative of 'dead letter' compliance,since very little was done to fulfil the original objectives of the AES, and likely, the national approach has been to grab the money rather than obtain results in terms of improvement of landscape and environment in general.

In the Netherlands, the schemes appear fairly well implemented; however, they do not provide results, due to domestic conditions with highly intensive agriculture. The attempt has the whole time been to favour biodiversity. This could be interpreted as a 'worlds of dead letter' compliance culture, since not enough effort is used to provide the desired outcomes, i.e. also in terms of changing local implementation structure until the results were achieved.

As for Greece, there appear to be several possibilities for categorizing the country. Lack of means in terms of regional and local administration is likely to categorize the compliance as a dead letter, since these conditions should be in place in order to expect proper implementation. Another option is to categorize the country as dominated by domestic policies, in terms of major focus on the structural development rather than the environmental dimensions of the RDP in terms of AES.

Romania is currently not categorized, but still serves as a very interesting example of new EU countries facing similar problems to the ones experiences by old EU countries in the past. Apart from this first analysis the following is worth noticing: there is not likely to be a connection between the intention of the policy and the likelihood to change the institutional framework. Apparently, few early moves stay dynamic as a consequence of EC induced changes, whereas the less institutionalised (GR, RO) show a tendency towards lack of compliance because institutional structures are not in place yet.

When it comes to discussion of the well-implemented schemes, it is worth to notice the differences between Denmark, the Netherlands and Austria. The Danish implementation is formally well planned and accepted among farmers, however the implementation through the agricultural ministry has likely influenced the content and the visions for the schemes in a less environmentally visionary direction. On the contrary, an implementation through the environmental ministry might have been an institutional barrier for participation in the schemes to many farmers. Afforestation schemes were implemented through the environmental ministry and implemented on many farms; however, the changes associated with afforestation changes the status of land from agriculture to forest completely, and do not modify an

agricultural practice. In this sense the change of practices is not likely to be considered a threat to /interference with agricultural practices in general. In Denmark, the implementation through the agricultural ministry may have been one of the reasons why the schemes have maintained a dynamic state. The implementation of environmental regulation through the agricultural ministry has placed the schemes beside what is considered the core contributions from the EU to farmers, in terms of the institutionalized single payments to the farmers. On the contrary in the Netherlands, schemes were implemented, but there appears to be a reluctance to change the contents and focus of the schemes in direction of the Habitats Directive. This could likely be because the policy is old, and has a long tradition of supporting the national preservation policy for biodiversity in the Netherlands.

Apart from the mentioned conclusions, indicating sequencing (path dependent development) influenced by the history of implementation, it is essential to focus on well-functioning institutions but also on the eventual impacts, because institutions may appear well-functioning without assuring actual impacts of a given policy. This appears to be the case in the Netherlands, where AES has not been strong enough to compete with intensifications in agriculture. On the contrary, Austria has ameliorated problems of land abandonment in mountainous areas. This could indicate that (market oriented) policies are easier applicable/have better effects in maintaining land use threatened by extensification or prolonging land uses in these cases, than competing with intensive land use where economic costs of an environmental compromise are likely to be bigger. In addition, it is important to focus on countries where other issues are by nature a higher priority than the environment (development of the agricultural sector in Romania), and where other factors have a larger influence on the natural environment than AES (where extensification caused by recession or system change is considered a positive influence on the environment, and out rules the influence of AES).

Table 16 Changes in policy implementation and institutional structure, depending on environmental pressures or other reasons, the time is set in parenthesis, and based on larger changes in policies and institutional framework.

Country	Changes in AES portfolio in order to support HD implementation	Changes in AES as consequence of Crisis or other adoption	Changes in institutional structure as consequence of HD/WFD implementation	Changes in institutional structures for other reasons	Statement of compliance with HD, through AES
NL		X 2010		X 2010	X
AT	X*	X 2007			X
RO		X			X
GR		X	x		X (2000)
DK	X		x **	X 1994, 1998, 2000	X (2009)

*) changes should be seen from wider perspective than just to support N2000

**) change mainly due to effects of administrative structural reform

The last question to be raised is whether the descriptions of the institutional framework reaches the farmer/ land owner directly, and thus whether there are additional institutional barriers to consider when EU policy is aiming at affecting land use change. I.e. is the implementation from EC to farmer covered, or are there any missing links? Based on the table 17below,it appears as if there is a missing link in terms of the advisors in most countries.

Table 17 Administrative structures/ institutional framework (agriculture/ environment non-existing other), and indication of failures in the institutional implementation through information from barriers or missing outcomes/impacts

Country	Lowest Level of AES Implementation (government, regions or municipalities)	Who addresses the farmer?	Is this person a representative of environmental or agricultural organisations or neutral	Has this structure been changed during AES implementation	Is this structure changing during the HD impl. (Y/N) (see also table 7)
NL	Mun	Advisors/POP	Neu	N	N
AT	Mun	advisors	Neu	N	N
RO	-	advisors	Agr	-	N
GR	Mun		Agr	N	Y
DK	Gov	advisors	Agr	Y	Y

14 Overall conclusions and perspectives

14.1 Compliance cultures in different policy contexts

In general, we have dealt with two very different policies: the AES characterized as 'changing domestic opportunity structures', since to some extent, the intervention was accompanying to the Mac Sharry reform, and thus offered an alternative to the price support of agricultural products. A more vague interpretation of the policy would characterize the policy as 'framing domestic beliefs and expectations', since it does not interfere with how schemes are implemented, and there are no predefined subjects that needs to be covered by the schemes.

The instrument is defined as a market instrument, which clearly influences the farmer through economic compensation on a voluntary basis. It may however be considered that well- functioning advisory services may facilitate uptakes and assist with understanding and the best possible implementation of the required agricultural practices on the agreement areas.

The Habitats Directive is an institutional compliance (prescriptive) framework, laying down a range of requirements to the domestic legal frameworks as well as to the implementation mechanisms. A mandatory institutional structure to the conservation of the European nature is induced, through area designations (Natura 2000 sites) and requirements to protection against deterioration as well as pro-active

conservation. It works through the domestic administrative structures, but leaves the lay-out of the management structure as well as the selection of instruments for pro-active conservation to the national discretion.

Reaching proper outcomes in farmland habitats may in many instances rest on funding for compensatory payments or subsidies for specific actions, which raises the question if the appropriate EU funding structure has been found, relying to a large extent on the integration of agricultural and nature conservation objectives, though voluntary schemes. In those cases, where the design of the schemes rests with the Agricultural ministry, non-optimal solutions for the nature conservation objective may result.

Table 18 describes how the theory of Worlds of compliances has been used to categorize the transposition of the two described policies: the HD and AES in each of the case study countries. A general observation is that the best fit category in terms of compliance depends on whether world of compliance is described based on the HD or AES. Using the above description of the policies, that informs us about the countries' compliance with two characteristics of the policies: whether the implemented policy is regulatory or compensatory, and whether the policy implies national strict requirement for a mandatory regulatorystyle or the policy barely demands changes of domestic mechanisms/ constitutes a framing of domestic beliefs and expectations. The resulting difference in observed category of compliance is interesting because the subject of regulation, in both cases is directed towards environment; however the HD is directed towards biodiversity, whereas the AES leaves several degrees of freedom concerning the exact formulation of objectives (natural resources, biodiversity, or landscape).

The observations underpin the idea that something apart from the policy subject is of major importance when it comes to policy implementation; that could be existing organisational structures or implementation mechanisms, but it could also be more related to domestic politics, (which has not been explicitly studied in the present research). On the other hand this also reveals cases of countries that follow a specific set of rules relatively strictly, whereas others oppose a strict set of rules or fit them to domestic policies. The same countries that comply with a set of strict rules, however acts less compliant when the frame is less strictly defined, and the countries that apply a domestic policy approach to specific institutional rules manages to comply well to the broader formulated policy.

Table 18 The following categorizations are tentatively observed concerning the Worlds of Compliances typology for Habitat Directive and Agri-Environmental Scheme adaptation and implementation

	AT	NL	GR	RO	DK
HD	(tendentially) Domestic policies	Domestic policies	Transposition neglect	(tendentially) Domestic policies/dead letter	Law observance
AES	Law observance	Domestic policies, Dead letter	Domestic policies,Transposition neglect	-	Domestic policies, Dead letter

14.2 Inputs to Volante roadmap

Volante aims to produce a roadmap for future land resources management in Europe. The deliverable describing road mapping methods are not yet due, but we will anyway try to sketch out some considerations for the roadmap, based on the present study. Any roadmap to reach visions of land resources utilization will imply the need for EU policies to address main objectives, or policies needed to indirectly support objectives. Thereby we anticipate that policy drivers will be important parts of the road map.

Already in the early larger EU research projects on policy assessment for land use sustainability, institutional issues were addressed as a missing aspect of ex-ante impact assessments. The present study supports that institutional issues are important aspects to address, if real policy outcomes are to be expected.

Based on the present study, we have the following tentative proposals for input to the VOLANTE roadmap. As mentioned in the introduction, these will be further discussed and elaborated in the future work.

1. *European level procedural issues for selection of policy option*
   a. Develop further and use methods for ex-ante assessment of institutional compatibility to implementation of policy options

2. *European level policy issue, to be addressed in relation to different policy options*
   a. Characterise the various policy options in questions in terms of mechanisms to be used
   b. Consider the specific challenges - substantial as well as institutional - that different (types of) member states or regions may have for the implementation of a given policy option.
   c. Consider if the institutional framework selected becomes an obstacle to changes in a well-established policy in the words of *Knill and Lehmkuhl (2002)"We argue that it is the particular type of Europeanization mechanism involved rather than the policy area itself that is the most important factor to be considered when investigating the domestic impact of varying European policies."*
   d. Consider how existing experiences from other policies and implementation in different types of countries may serve as goods examples (i.e. constitutes the roadmaps to successful implementation and outcomes), but be aware that there may be unobserved obstacles, when instruments and institutions are combined in a new country.
   e. An option in certain cases is to use a test policy in order to reveal if existing institutions are in place for implementation of a successful policy.
   f. Consider the policies to which integration will need to be ensured and include this in the policy design.

3. *European level preparation of implementation of policy option*
   a. Convert the policy to well defined institutional demands in order to assure the right structures are present or can be established in each country, or make the country assure that another alternative in the present institutional structure is present.

b. Avoid instruments based on a 'on size fits all' approach.

c. Map out the implementation phases and specific institutional challenges for these phases

d. Consider the funding mechanisms and if they are adequate for the implementation levels

e. Ensure that funding mechanisms and expectations to effort (measures as well as administrative effort) is aligned

f. Consider the need for training tools for multi-level and multi-stakeholder implementation

4. *European level issues while implementing of a policy option*

a. Develop supporting definitions and guidelines for different steps in the implementation before deadlines are reached or overrun, to reduce juridical interventions.

b. Take into account the specific challenges identified in phase 2b when producing guidelines and other supporting material

5. *Domestic Government frameworks*

a. Assure that sufficient expertise and qualified personnel is available at relevant levels or that supporting structures, such as financial support, training material, guidelines etc. are made available .

b. Assure that the right trajectory and organizational structure is chosen (e.g. agricultural vs. environmental administrations or neutral organizations).

15 References

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Annex 1: Guideline for country study document analysis

1. Document analysis of national/regional policy implementation of EU policies

Material: e.g. legal documents, policy programmes, evaluations, reports

Outline

The main focus is to elucidate the role and importance of the implementation framework, consisting of the administrative and organisational structure (roles and responsibilities), the instruments and measures used in implementation, and the role of stakeholders and the broader public.

Definitions:

Following definitions of **instruments** are used:

- Persuasive approaches: policy tools that encourage changes in behaviour through the provision of information, such as via general education programs, guidelines and codes of practice, training programs, extension services and research and development.
- Regulatory approaches: require changes in behaviour by introducing penalties for parties who don't comply with the regulatory provisions. Types of regulatory instruments include standards (including planning instruments), licensing, mandatory management plans and covenants.
- Market based instruments: policy tools that encourage behavioural change through market signals rather than through explicit directives. Examples are subsidies and grants, stewardship payments, and taxes.
- Public provision of services: often used where the management solution has the characteristics of a 'public good' which make it difficult for the service to be provided by the private sector, e.g. national parks.

When **authority (type (e.g. ministry of Environment), level (e.g. regional))** is asked for, it is important to be able to see the distribution of roles (e.g. decision-making, planning, and implementing), in order to be able to characterise the implementation framework as multilevel, multiactor or more centralised governance structure (i.e. decisions are taken nationally, or some decisions are also regional/local, if implementation is also centralised or allocated to regional/local bodies, if stakeholders are involved)

1. **National implementation of the Habitats directive**

   Legal implementation

   1.1. When was the Habitats Directive transposed into national law

   1.2. How has the legal implementation taken place? (Here it should be described if existing laws were adapted, if one or more new laws were adopted, or if no transposition to national law has yet taken place, moreover if any executive orders have been adopted following the law(s)).

   1.3. Describe the content and objectives of the policy before the HD

   Policy instruments and measures

   1.4. Were the N2000 sites protected or managed for nature conservation before the implementation of the HD? If this is the case, which instruments were used for protection? E.g. designation as national park (which protection?), restricted use or other? How did the

criteria for designations according to the HD match the domestic classifications of nature types?

1.5. The habitats directive states that if need be, MS shall secure a management which corresponds to the ecological requirements of the natural habitat types and the species being protected. Has management plans been developed for the N2000 sites?

1.6. Who are responsible for the planning? And for the maintenance/restoration/provision of the protected habitats?

1.7. Which specific measures have been used for protection in N2000 sites? Describe in time periods where relevant – otherwise refer to present practise.

Examples:

- Subsidies for extensification, set-aside etc. in N2000 sites
- Regulations on land use (explain in detail) in N2000 sites

1.8. MSs are by the directive required to ensure that assessment of other plans does not interfere with the N2000 sites' conservation objectives (§6).

- How is that implemented?
- Are there any formal or informal integration between national spatial planning and the policy in question? Examples: Are local or regional development or spatial plans required (by law or executive order) to take into account management plans for nature protection?
- Are environmental impact assessments or strategic environmental assessments of N2000 plans required and carried out, which need to assess the impact on N2000 sites or other nature protection?

1.9. Has any other instruments than N2000 been adopted to implement the Habitats Directive in your country? If yes, please explain in the same categories as above Examples:

- Regulatory: Designation of protected areas, national parks, protection of forests, etc.
- Subsidies for extensification, hedgerow planting, etc
- Regulations on land use (explain in detail)
- …
-

1.10. Summarising from above, which type of policy instruments have been used for implementing the policy? (market based – e.g. subsidies, taxes, fines; regulatory – rules and regulations (e.g. prohibition of specific uses etc), suasive – voluntary agreements without compensation, campaigns).

Delegation of roles

1.11. Who are responsible for

- Designation of N2000 areas
- Planning and production of program of measures for the N2000 areas

- Daily implementation of measures (e.g. maintenance, restoration, provision of new habitats)
- Monitoring of the sites

1.12.   Are several owners/managers involved in the management of land use in N2000 sites?
- If yes, are several measures in play in the same N2000 sites?
- Does this create problems for reaching the targets/objectives for the N2000 sites?

1.13.   Which authority is in charge of assessing the impacts of projects or plans (e.g. through Environmental Impact Assessment and Strategic Environmental Assessment or other regulations) (type, level)

Financial aspects

1.14. How many financial resources were allocated to the different measures, and how many of these were actually used (if available, e.g. from evaluations)?

1.15. In case of subsidies to land use change or other financed measures – from which sources were financing derived

Examples:
- National budget
- EU Rural development program or Structural Funds
- Regional/local budget
- Local budgets

Stakeholder involvement

1.16. Whom are the actors that measures are directed at? (e.g. citizens, farmers, entrepreneurs, etc).

1.17. Are there any institutional stakeholders taking interest in the policy area? (e.g. farmers' organisation, green NGOs, water suppliers…) – how does this show?

1.18. Have a formalised or informal dialogue with actors and stakeholders taken place (hearings, consultations, workshops etc) before policy measures have been decided?

1.19. Are any advisory or coordination bodies attached to the implementation process?

Evaluations and identification of implementation barriers

1.20. Has any evaluations of the Natura 2000 implementation been carried out at the national level? If yes, please described the results in terms of both administrative performance (has the measures been implemented as intended), the results (has measures been implemented – e.g. land use change) and the outcomes (has the protection objectives been achieved in terms of ecological status).

1.21. Has the implementation of the HD been evaluated?

1.22. Have other types of evaluations taken place in relation to the implementation of the HD (e.g. for national parks, etc)

1.23. If yes, are specific barriers related to institutions and governance issues described in evaluations or other literature on the implementation of the HD?

1.24. Has other barriers been identified in the documents you have analysed, or raised by stakeholders?

2. **National implementation of EU agri-environmental policy**

The policy can be divided into three main reform periods, with :

- 1992 – 2000: The MacSharry reform accompanying measures (voluntary)
- 2000-2006: Agenda2000 reform establishing the two pillars of the CAP, with agri-environmental policy as one axis in pillar 2 (compulsory). In 2003 a reform, introducing a.o. the Single Payment Scheme were introduced
- 2007-2013: The second rural development program including agri-environmental schemes. The Health Check reform implemented in 2009 changed a.o. the agri-environmental schemes, strengthening the link to the challenges in managing water, biodiversity, climate and energy.

Definitions:

It is distinguished between agri-environmental programmes, schemes and measures. An agri-environment programme is considered to be the collection of schemes implemented in a country. Individual schemes have different objectives (e.g reducing nutrient emissions or protecting biodiversity) and may consist of a set of measures (e.g. wetland construction and buffer zones, or extensification of grassland management)

Legal implementation

For each period since 1992 relevant to your country:

2.1. How has the legal implementation taken place? (Here it should be described if existing laws were adapted, if one or more new laws were adopted, or if no transposition to national law has yet taken place, moreover if any executive orders have been adopted following the law(s)).

2.2. Describe the objectives of the law(s) and the executive orders (only in terms of which issues are the priority issues –e.g. biodiversity, bioenergy…)

- Which agri-environmental schemes/objectives were defined? (e.g.: reducing nitrogen emissions, or protection against soil erosion). Were they horizontally oriented or only eligible in designated areas?
- Who (which authority) decided on these objectives?
- Were stakeholders or citizens involved in the decision procedure?
- Were any of the objectives specifically aimed at Natura2000?
- Which measures were adopted for each objective? (e.g.: subsidies for wetlands, or for extensive grazing…)
- If possible, state the financial shares allocated to each measure (indicating which are considered most important), and if the resources were used.

2.3. Which types of policy instruments have been used for implementing the policy? (market based – e.g. subsidies, taxes, fines; regulatory – rules and regulations (e.g. prohibition of specific uses etc), suasive – voluntary agreements without compensation, campaigns).

2.4. Which authority decides on the instruments/measures to use? (type, scale-level)

2.5. Which authority is responsible for implementing the above measures? (type, scale-level)

2.6. Financial aspects

- What was the financial distribution of the allocation between first and second pillar?
- How has modulation (transferring economic resources from pillar 1 to pillar 2) been used in the MS – and how large a modulation has been selected, if any)

2.7. Whom are the actors that measures are directed at? (e.g. citizens, farmers, entrepreneurs, etc).

2.8. Are there any institutional stakeholders taking interest in the policy area? (e.g. farmers' organisation, green NGOs, water suppliers…). How does this show?

2.9. Have a formalised or an informal dialogue with actors and stakeholders taken place (hearings, consultations, workshops etc) before policy measures have been decided?

2.10. Are any advisory or coordination bodies attached to the implementation process?

Documentation of land use/landscape changes induced by the agri-environmental measures

2.11. Based on evaluations carried out in your country, (the rural development programme has been evaluated in 2003 and in 2008),describe the results for the agri-environmental measures in terms of

- outputs: administrative performance (has resources been used as intended),
- results (has measures been implemented – e.g. agreements on extensification, grazing, etc.) and which land use/landscape changes has been documented,
- outcomes (has the protection objectives been achieved in terms of ecological state).

Obstacles to policy implementation

2.12. Which main barriers to policy implementation have been documented in the evaluations?

2.13. Are specific barriers related to institutions and governance issues described in evaluations or other literature?

Annex 2: Interview guidelines

Interview guide – National implementation of the Habitat Directive, and of the CAP-AE measures

Questions to be posed to: Pia Frederiksen (pfr@dmu.dk) or Anne G. Busck (agb@geo.ku.dk)

Following the document analysis of the domestic implementation of the Habitats Directive and the CAP-AE measures, we will explore more the barriers to implementation, and specifically those, that can be traced to the perception of the transposition, administrative organization, the measures selected and the governance process in general.

The guide has two columns. Left column is research question – here we write the main question we would like to have answered. Right column is possible questions to ask in order to get at an answer to the research question. Having the two columns has several purposes. In preparation of the interviews the left column is used to sharpen the focus and be explicit about the purpose of the interview. During the interview the left column is used to keep the focus during the interview. The right column is used as a helping 'check list' – questions I could use in order to get going (intro question) / get back on track (sub questions).

It is suggested to whom you could pose the questions. This is only a suggestion, and before you venture into the interviews you should adapt the questionnaire to your specific context, and to the type of interviewee (see also accompanying letter). We have indicated our suggestion with following:

POL: politician or political branch of authority
CA: central authority
LRA: Local or regional authority
NGGO: Non-governmental green organization
NGAO: Non-governmental agricultural organization
EX: Experts, scientist, monitoring experts
Other NGOs could also be relevant, depending on the situation in your country

Habitats Directive

Research question	Possible questions to ask
The national transposition of the HD I Do the actors find the transposition sufficient and adequate? EX, CA, LRA, NGGO	Intro: Does the national legislation in your opinion sufficiently cover the all required measures according to the HD? (e.g.: does the designations cover the habitats for protected species, or: is assessment of implications implemented in legislation) ● To which extent are habitats and species,which are protected by the HD but located outside N2000 areas, sufficiently protected by the domestic legislation? (CA, EX, LRA, NGGO) ● In your opinion, does the legislation sufficiently protect the N2000 areas from activities outside the N2000 areas (chapter 6 protection) – how? (CA, EX, LRA, NGGO)
The national transposition of the HD II Which legal acts have been revised / new written (check of results from literature study) – and do the actors find the legal basis adequate for administration? LRA, CA	Intro: Are sector laws amended due to the transposition (e.g. nature protection, forests, agriculture, …), if yes, which – or has a "N2000 law" been adopted ● Has the transposition of the habitats directive resulted in a (too) complex administration basis (many laws, many executive orders)? (CA, LRA) ● Could the transposition have been done differently (other/new legal acts etc) – to be more adequate in your opinion? (CA, LRA)
The structure of the enforcement administration I How are roles and responsibilities distributed amongst administrative actors – and how is the work coordinated vertically and horizontally? – And is the coordination adequate? CA, LRA	Intro: What are the obligations and tasks of different levels of governance in terms of implementation of the legislation following the HD? (e.g. national, regional, local levels)? (CA, LRA all questions) ● How are the obligations and tasks distributed between specific units – eg in one national body versus a number of ministries; or the same question at regional / local level ● How is the work coordinated amongst national actors and between national, regional and local levels? (eg coordination fora - both official and unofficial/ad-hoc) ● Do you find the coordination sufficient? Why /why not? ● Do you see any barriers to coordination? ● Is the organization of tasks and obligations – in your opinion adequate?

	• What could enhance the coordination?
The structure of the enforcement administration II How is the coordination between HD objectives and other environmental objectives? CA, LRA, NGGO,	Intro: How are the coordination between HD objectives and other environmental or nature protection issues at national / regional / local level (ask differently according to which actor is interviewed)? • Is the coordination institutionalized – or more on an ad hoc / personal basis? (CA, LRA) • Especially – how is the coordination between the WFD and HD objectives and implementation? – Is coordination already established – or on its way? (CA, LRA)
Prioritisation of HD and domestic nature policy How are the objectives of the HD being prioritizised and has the implementation of the HD had detrimental or positive consequences for domestic nature policy implementation? POL, CA, LRA, NGGO,	Intro: How do you perceive the priorities in your country between the HD objectives and national nature protection priorities? • Has the implementation of the HD implied a lesser prioritization of domestic policies and measures for nature protection? (POL, CA, LRA, NGGO) • If yes, how is that demonstrated? (POL, CA, LRA, NGGO)
The implementation measures From designations to actual achievement in relation to nature protection. What are the most relevant measures to introduce? CA, LRA, NGGO, NGAO, EX	Intro: Natura 2000 areas have been designated – next the areas should be managed and measures introduced in order to implement the objectives. Do you find the current implementation adequate? • Has the Natura2000 designation in your opinion been sufficient to implement the objectives of the HD? (CA, LRA, NGGO, EX) • Are or will management plans for N2000 areas be produced? – when, deadlines? (check if information is already in doc analysis - CA) • Which measures are introduced (check if information is already available from doc analysis – CA) • Do you find the selected measures effective and sufficient to protect the N2000 areas? (CA, LRA, NGGO, EX, NGAO) • Do you have any suggestions concerning other measure, which would enhance the

	implementation of the HD objectives in your country? (CA, LRA, NGGO, EX, NGAO)
The implementation processes How has the implementation process of the HD related measures been so far? CA, LRA, NGGO, NGAO, EX	Intro: What have been main obstacles to the implementation of the HD so far? • Which stakeholders where involved in the designation of the N2000 sites – where there any barriers in the designation process? – which and why? (CA) • Which barriers do you experience for implementation of the HD measures? (CA, LRA)
Finances (How) are all the 'good intensions' backed up by finances? CA, LRA	Intro: How is the implementation of the measures related to the HD financed? (Check with document analysis report) • In your view, are financial resources sufficient in relation to national objectives (CA, LRA) • Are financial resources earmarked the measures for implementation of HD, or are they part of a general nature/environment/overall budget? (CA, LRA) • From where does finances for specific measures derive (EU, national)? (CA) • To which extent do other sectors exert influence on the use of resources? (CA. LRA)
Implication of HD implementation on landscape and nature protection (How) has the implementation of the HD impacted the actual land use, protection of nature and relevant stakeholders? CA, LRA, NGGO, NGAO, EX	Intro: Has the HD in your view changed the landscape or land use in your country? • How has the implementation of the HD influenced stakeholders not related to nature protection – eg farming? (CA, LRA, NGAO) • Has (agricultural) land use in N2000 areas been extensified as a consequence of the designation (CA, LRA, NGAO, NGGO) • Has the HD strengthened nature protection in your country – in which ways? (CA, LRA, NGGO) • Do you perceive any landscape changes being a consequence of the HD implementation? (CA, LRA, NGAO, EX)
Implication of HD implementation on nature protection	Intro: In which ways did the HD implementation change the national nature protection?

(How) has national nature protection changed because of the implementation of HD? – is this positive or negative?
POL, CA, LRA, NGGO,
	• (How) are the instruments/measures different from what they were before? (CA, LRA)
	  ○ E.g. has instruments and regulation been concentrated (too much) more on N2000 objectives at the expense of former protection measures?
	  ○ E.g. has the focus moved from one type of areas / nature types to other (e.g. to N2000 designations, or buffer zones around these, from the general landscape)
	• Which impact do you think the changes in nature policy following HD has had on the possibilities of protecting nature in your country? (POL, CA, LRA, NGGO, EX)
	• Do you find the change positive or negative for the protection of nature? (POL, CA, LRA, NGGO, EX)
	• Do you think some species or nature types (habitats) have become more or less protected? Which and why? (EX, CA, LRA, NGGO)

Monitoring issues (How and by whom) is the implementation of the HD being monitored? – is this adequate EX, CA, LRA, (NGGO, NGAO if feasible)	Intro: The effects of implementation should be monitored. Who has the responsibility and is the program adequate? • In your opinion – is the current monitoring practice adequate? (EX, CA, LRA, NGGO, NGAO) • How could monitoring be enhanced? (EX, CA, LRA, NGGO, NGAO)

CAP-AE measures (periods: 2000-2006, 2007-2013) (AE here referring to second axis measures in the Rural development program)

National transposition Is the domestic AE program selected appropriate for the problems in your country? CA, LRA, NGGO, NGAO	Intro: Are the schemes selected adequate for the domestic environmental problems? • Which articles/schemes have been selected in the two periods (this inf. Should be available from the doc analysis) – (otherwise ask - CA) • Do the AE schemes selected correspond to the problems you perceive relevant? (CA, LRA, NGGO, NGAO) • Do you think that the schemes now available present an improvement to former programs? – why? (CA, LRA, NGAO)

The structure of the enforcement administration Is the distribution of roles and responsibilities adequate? CA, LRA, NGAO	Intro: The allocation of subsidies may be centralized or decentral – how is the present distribution of roles and responsibilities perceived? ● In your opinion, is the distribution of roles and responsibilities for allocation of subsidies and implementation of objectives are adequate (CA, LRA, NGAO) ● Do you experience any obstacles in the vertical coordination between central government and local administration for implementation of the schemes? (CA, LRA)
The implementation processes Are the schemes successfully implemented and what are the factors influencing success/failure CA, LRA, NGAO	Intro: Have the schemes been used and why/why not? ● What has been the uptake of different schemes, and what are controlling factors for the attractiveness to farmers? (CA, LRA, NGAO) ● Do you experience any obstacles in the process of seeking, allocating and receiving subsidies – which? (CA, LCA, NGAO) ● How are farmers informed of the possibilities for seeking subsidy? (CA, LRA) ● Do the information reach all farmers, and if not, why? (CA, LRA, NGAO)
Finances To which extent has the financial options given from EU been fully used, and are the schemes sufficiently attractive for farmers? CA, NGAO	Intro: The resources used in pillar 2 can be increased by modulation (moving funds from 1st pillar to 2nd pillar, with national co-financing. (From 2003 modulation became mandatory with an increasing percentage, from 2005, modulation could be increased voluntary to 20%, Romania exempted until later) ● Has modulation been used in your country? To which extent? (CA) ● Are the subsidies sufficiently attractive to farmers? How could they be improved (NGAO)
Impact Do the schemes influence land use and landscape change, and do they help protecting biodiversity? CA, LRA, NGGO, NGAO	Intro: Do the AE schemes inflict major changes in landscapes, and do they have a real effect for biodiversity? ● To which extent do you perceive that landscapes are changed as a consequence of the AE-schemes? (CA, LRA, NGGO, NGAO) ● Which processes would you point to as the major drivers of landscape change? (CA, LRA, NGGO, NGAO) ● How important do you perceive the schemes addressing biodiversity for this objective? (CA, LRA, NGGO, NGAO)

	• What would adequate schemes/measures under the RDP for protecting biodiversity in your opinion look like? (CA, LRA, NGAO, NGGO)

iIn 2005, the Government, the provinces, the Association of Netherlands Municipalities (VNG) and the Association of Water Boards (UvW) agreed on the Rural Areas Development Act (WILG) coming into effect from 2007 and dealing with everything regarding rural development. The Second Multi-year programme for a living countryside (MJP2), launched in 2007, established a new administrative model setting up the on-going decentralization from the government to the provinces. It is also based on the new single funding system set up with the WILG, joining the budget of different ministries. Topics of the MJP2 address either, agriculture, landscape, environment, nature or water. During the RDP period a decentralisation process took place, with a shift of responsibility and implementation from the national government to the provinces. Since 2010, with the SNL, each Province can makes its own changes and decide which packages can be proposed to farmers. This situation would in principle mean that the implementation and evaluation will be much more in line with the regional conditions. However, opinions differ to what extent this is really the case. Concerns are expressed regarding the fact that an overall picture of the nation-wide achievement of the conservation policy targets could hardly be expected. According a study of the Netherlands Environmental Assessment Agency, this would be undesirable not only because it will make it difficult to direct the programs, but also because the Netherlands will still have international and national obligations to be able to demonstrate, at any time, what progress has been made in the nature conservation policy. It stresses the need of a good harmonization.
iiIn 2010, the RDP2 was amended since new funds were available thanks to the decision adopting the Health Check of the CAP. Other funds were available under the Economic Recovery Package [is there any more info regarding this?
iiiDemographic structures influence since young people move to the cities, and land is left set aside
ivFarm structure has influence in combination with owners' skills, since many subsistence level farmers need knowhow and financing to apply for support, in addition advisory agencies do not have the capacity to give proper advice.