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EU Biodiversity Policy: An Effective Approach to Combating Biodiversity Loss in Europe?

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I declare on oath that I authored the following paper independently and without assistance and that I only used the resources indicated in the paper.
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List of Acronyms

BAP	Biodiversity Action Plan
BISE	Biodiversity Information System for Europe
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
COP	Conference of the Parties
EEA	European Environmental Agency
EAP	Environmental Action Programme
EC	European Community
EIA	Environmental Impact Assessment
EU	European Union
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
MDG	Millennium Development Goals
MEA	Millennium Ecosystem Assessment
SEBI 2010	Streamlining European 2010 Biodiversity Indicators
SWOT	Strengths, Weaknesses, Opportunities, Threats
TEEB	The Economics of Ecosystems and Biodiversity
UN	United Nations
UNEP	United Nations Environment Programme

1. Introduction

"We must remember: extinction is forever." (Barroso, 2008)

2010, the International Year of Biodiversity, was ironically also the year in which the international community failed to achieve the ambitious target of significantly reducing the current rate of biodiversity[1] loss by 2010.

It was the European Union who played a leading role in promoting biodiversity issues both on a European and global level. Going a step further, the EU Member States committed to halting biodiversity loss in the European Union by 2010 (Presidency Conclusions, Göteborg European Council 15 and 16 June 2001). Relevant objectives were set out in the *Sixth Environmental Action Programme* (EAP) (COM 2001 31 final) and several Biodiversity Action Plans (COM (2001) 162 final; COM (2006) 216 final; SEC (2006) 621). However, at the beginning of 2011 it is apparent that the EU has not been able to meet the 2010-target.

Against this background this bachelor thesis examines and assesses the EU biodiversity policy. The findings will be used to suggest reasons for the failure to achieve the 2010 target and to propose recommendations for a post-2010 biodiversity strategy.

This chapter presents the object of research and methodology.

Chapter 2 introduces the concept of biodiversity and the issue of biodiversity loss followed by an overview of the most important actors and instruments of this policy area. The last part of the chapter is devoted to the development of a biodiversity policy on a EU level by means of legal and political provisions. Of particular importance are the *European Community Biodiversity Strategy* (COM (1998) 42 final), the *Sixth Environmental Action Programme* alongside its related *Biodiversity Action Plans* (Decision 1600/2002/EC; COM (2001) 162 final), and the *Commission Communication on Halting the Loss of Biodiversity by 2010 – and Beyond: Sustaining ecosystem services for human well-being,* including the annexed *Biodiversity Action Plan* (COM (2006) 216 final; SEC (2006) 621).

Chapter 3 addresses the rationales brought forward by the EU for protecting biodiversity. They include ecological, economical, legal, and ethical motives.

[1] The terms "biodiversity" and "biological diversity" are used synonymously.

[2] The abbreviation "biodiversity" was developed by biologist Edward Wilson at the National

Building on the groundwork of previous chapters the EU biodiversity policy will be analysed by means of a SWOT analysis in Chapter 4. In a first step the policy will be examined with regard to its strengths, weaknesses, opportunities, and threats. The assessment will build on own findings, the *Commission Communication on Options for an EU vision and target for biodiversity beyond 2010* (COM (2010) 4 final), the *2010 Assessment of Implementing the EU Biodiversity Action Plan* (COM (2010) 548 final), and a study on the 2006 *Biodiversity Action Plan* tendered by the European Commission (Herkenrath, 2010). In a second step, drawing on the findings from the SWOT analysis, it will be investigated why the EU biodiversity strategy failed to achieve the 2010 target.

Chapter 5 reflects on the findings from the SWOT analysis and presents a normative catalogue of recommendations for a revised post-2010 EU biodiversity policy.

A conclusion and an outlook on the current discussion on a post-2010 EU biodiversity policy will be given in Chapter 6.

1.1 Object of Research and Research Question

This bachelor thesis focuses on the subject of EU biodiversity policy. Initiated by the European Community's accession to the United Nations (UN) *Convention on Biological Diversity* (CBD) (1992) the Community has been establishing a European policy framework in order to protect biological diversity and combat its decline. Against this background the thesis examines the central research question:

Why did the EU fail to achieve the target of halting biodiversity loss in Europe by 2010?

The analysis is based on finding answers to the following five sub-questions:

(1) What is biodiversity? (Chapter 2.1)
(2) How did the EU biodiversity policy evolve? (Chapter 2.3)
(3) What are the rationales for a specific EU biodiversity policy? (Chapter 3)
(4) What are the strengths, weaknesses, opportunities and threats of EU biodiversity policy? (Chapter 4)
(5) What could a future EU biodiversity policy look like? (Chapter 5)

1.2 Theoretical Approach and Research Method

The concept of biological diversity stems originally from the discipline of conservation biology. It was developed in the late 1960s by Raymond Dasmann (1968) but it took over 20 years until the concept came into common scientific usage

and the abbreviation biodiversity[2] was introduced (Brand, Görg, Hirsch, & Wissen, 2008). The *Global Biodiversity Assessment* (Heywood, 1995), a project launched by the United Nations Environment Programme (UNEP), provided the first comprehensive analysis of the scientific concepts and principles relating to biodiversity and gave an overview of the current state of knowledge.

Still, until today there is no definite scientific definition of biodiversity aside from the general understanding that biodiversity measures the "richness and diversity of life" (Pullin, 2002: 6) and that the term encompasses three key components: genes, species, and ecosystems (Norse et al., 1986; OTA, 1987). Table 1 presents a selection of the multitude of definitions that have been developed over the years.

Table 1 Selection of Definitions of Biodiversity[3]

Source	Definition
Van Dyke (2008)	Biodiversity: the entire array of earth's biological variety, contained in genes, populations, communities, and ecosystems.
Pullin (2002)	Biodiversity is commonly considered at three different levels: 1. within-species (intraspecific) diversity, 2. species (interspecific) diversity, 3. community or ecosystem diversity.
Heywood (1995)	The total variability of life on earth.
Wilson (1992)	The variety of organisms considered at all levels, from genetic variants belonging to the same species through arrays of species to arrays of genera, families, and still higher taxonomic levels; including the variety of ecosystems, which comprise both the communities of organisms within particular habitats and the physical conditions under which they live.
Groombridge (1992)	Term commonly used to describe the number, variety and variability of living organisms.
OTA (1987)	Biological diversity refers to the variety and variability among living organisms and the ecological complexes in which they occur. Diversity can be defined as the number of different items and their relative frequency. For biological diversity, these items are organized at many levels, ranging from complete ecosystems to the chemical structures that are the molecular basis of heredity. Thus, the term encompasses different ecosystems, species, genes, and their relative abundance.

[2] The abbreviation "biodiversity" was developed by biologist Edward Wilson at the National Forum on BioDiversity, a conference held in Washington in 1986 (Brand et al., 2008; Suplie, 1996).

[3] Source: Author's design; based on Van Dyke (2008: 85), Pullin (2002: 6), Heywood (1995: 5), and OTA (1987: 3).

Further information on the topic of biodiversity and biodiversity loss is presented in Chapter 2. However, a more in-depth discussion of biodiversity from a biological point of view would exceed the scope of this thesis, even more so considering that the object of research is not biodiversity itself but biodiversity policy. Therefore, the definition and explanation given in Chapter 2.1 shall suffice for this thesis. [4]

With regard to research method the thesis employs an empirical-analytical approach (with the exception of Chapter 5, in which normative recommendations for a future European biodiversity policy are discussed). The assessment of the EU biodiversity policy will be based on a SWOT analysis. SWOT analyses, originally a strategic planning tool, are used to evaluate the nature of an organisation's business environment and its strategic capabilities by assessing its strengths, weaknesses, opportunities, and threats (Mullins, 2010). A detailed description of the SWOT analysis is given in Chapter 4.

2. Biodiversity as a Field of Action in EU Environmental Policy

The following chapter investigates the field of biodiversity policy as part of the EU environmental policy. Subsequent to the definition of terms relevant to this field of action, an inventory of past and current EU biodiversity policy is depicted.

2.1 Biodiversity

Compared to environment issues such as pollution or climate change, biodiversity is a relatively young albeit important field of action. But what is biodiversity? Due to the complexity of the subject and the ensuing scientific uncertainty a generally accepted definition does not exist. As this thesis investigates EU biodiversity policy, the definitions used in the following are the definitions agreed on and laid down by the EU in its legal acts relating to biodiversity.

Biodiversity and Ecosystem Services

As a member to the CBD the EU employs the convention's definition of biodiversity:

> "*Biological diversity* means the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." (Article 2 CBD, emphasis in original)

[4] For relevant specialist literature refer, for example, to Van Dyke (2008), Hunter (2002), Pullin (2002), and Heywood (1995).

Biodiversity is a synthesis of three basic elements: genes, species, and ecosystems for which definitions can be found in the 2001 *Biodiversity Action Plan for Agriculture* (COM (2001) 162 final):

> "Genetic diversity [is] the variety of genetic building blocks found among individual representatives of a species; Species diversity [is] the variety of living organisms found in a particular place; and Ecosystem diversity [is] the variety of species and ecological functions and processes, both their kind and number, that occur in different physical settings." (ibid.: 6)

During the past few years the academia has realised that ecosystems are of particular importance because they provide ecosystem services[5] which are crucial to human life. The *Millennium Ecosystem Assessment* (MEA) (2005), a comprehensive United Nations (UN) study on the conditions and trends in the world's ecosystem and ecosystem services, distinguishes between supporting, regulating, cultural, and provisioning services, ranging from the provision of food, clean air, and natural resources to flood mitigation, recreation and crop pollination. Given their close connection, the loss of biodiversity often is accompanied by the loss of these ecosystem services. The major reason for this lies in the public good[6] nature of biodiversity and ecosystem services and the resulting difficulty to reflect their "true" value in market prices (cp. Ch. 3). Economists such as C. Perrings suggest that "the allocation of biological resources on the basis of current market signals is **inefficient** and **inequitable**" (1995: 903, emphasis in original) because it fails to account for the social costs of biodiversity loss[7]. To date, the gap between market prices and the value of biodiversity and ecosystem services has still not been bridged. Incomplete knowledge and scientific uncertainty further impede other ways of estimating fair prices (Dalmazzone, 2008). As a result, policy-makers in the past have usually ignored these aspects when making decisions concerning biodiversity – with negative consequences for human welfare (ibid.).

After acknowledging the importance of biodiversity and ecosystem services, the Contracting Parties to the CBD developed and endorsed the ecosystem approach, "a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way." (COP 5 Decision

[5] The concept of ecosystem services, though already developed in the mid-1960s, came to be widely known and publicly accepted only in the 1990s (Kettunen & ten Brink, 2006).
[6] Public goods are goods that are non-rival and non-excludable (Mankiw, 2004).
[7] A detailed presentation of the economics of biodiversity would exceed the scope of this thesis; for further information refer, for example, to Perrings et al. (1995).

V/6) As a Contracting Party to the CBD, the EU adapted the ecosystem approach as framework for its biodiversity policy (Article 6 (2) Decision 1600/2002/EC).

Drivers of biodiversity loss

There are manifold direct and indirect causes for the decline of biodiversity. First of all, it must be noted that biodiversity loss is not a new phenomenon and has occurred many times in geological history. In the past, however, extinction of species or the destruction of ecosystems was induced largely by non-human, extrinsic influences such as continental drift, glacial periods or comet impacts (MEA, 2005). The current rate of loss, in contrast, results almost exclusively from human activities and intrinsic processes such as pollution or land use. Moreover, it occurs at a rate much faster than in previous eras. The MEA names habitat change, loss and defragmentation, invasive alien species, pollution, over-exploitation and unsustainable use, and climate change as the five anthropogenic direct drivers of biodiversity loss. Typically, the effect of these direct drivers on biodiversity is further exacerbated by five indirect drivers[8]: demographic development, economic variables, policy and institutions, cultural and religious factors, and scientific and technological change (MEA, 2005).Obviously, the significance of those drivers of biodiversity loss varies between regions. In the EU territory, land-use change (in particular agriculture and defragmentation) and climate change are indentified as the main threats to biodiversity (COM (1998) 42 final; COM (2006) 216 final).

2.2 Actors and Instruments of EU Biodiversity Policy

Actors

EU biodiversity policy is shaped by several actors on EU and Member State level. On EU side the central actor is the European Commission. The Commission issues communication and action plans to the European Parliament and Council, develops and proposes legislation in the form of directives and regulations, and monitors the implementation process in the Member States. In addition, several informal organisations – most importantly the European Environmental Agency (EEA) – support the Commission's work by providing, evaluating, and publishing information on biodiversity (and environmental policy in general). The European Parliament and the Council in their function as legislature are responsible for adopting all legislative

[8] For further reading on indirect drivers of biodiversity loss refer, for instance, to Deke (2008).

acts such as the *Habitats Directive*, EAPs, and Action Plans. Lastly, the European Court of Justice ensures the application of European law concerning biodiversity.

Instruments

Concerning the design of the biodiversity policy framework there are several instruments, including directives, EAPs, Commission Communications, and Action Plans. They can be grouped into two categories: legislative and policy instruments.

Directives such as the *Habitats* or *Birds Directive* fall under the first category. The foundational provision in Article 288 Treaty of the Functioning of the European Union lays down that a "directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods".[9] More significant in terms of promoting and establishing biodiversity policy are, however, policy instruments (EAPs, Commission Communications, Action Plans). Although neither legally binding nor enforceable, those documents help to develop the policy framework. They aim to facilitate the process of decision-making and consensus-building on a European level and often influence action on a national level.

Division of Labour

On a Member State level usually the Ministry of the Environment is responsible for implementing EU biodiversity policy. As all members of the EU are also Contracting Parties to the CBD, their obligations are twofold: on the one hand they made commitments under the Convention and on the other hand they are subject to the provisions of EU biodiversity policy. Given that the EU also adopted the CBD, there is no conflict of interest as one might imagine. The most important obligation Contracting Parties assume under the CBD is to develop national strategies on biodiversity as laid down in Article 6. Therefore, both the EU and all Member States have adopted (national) biodiversity strategies during recent years[10]. The EU biodiversity policy imposes further actions on Member States. First of all, they have to implement the directives. With regard to the *Habitats Directive* (92/43/EEC) that means, for example, the establishment of Natura 2000 sites of special protection. In addition, there are the provisions of the Biodiversity Strategy and Action Plans. For

[9] In addition, the EU Court of Justice established that directives have vertical direct effect. Direct effect is a doctrine of EU law that confers rights on individuals which they can invoke before the national and Community courts (Craig & De Bùrca, 2008).

[10] See for example BMU (2007) for the German "National Strategy on Biological Diversity".

instance the *EU Action Plan to 2010 and Beyond* (SEC (2006) 621) contains a detailed list of actions to be taken by Member States and by the Community.

2.3 Inventory of EU Biodiversity Policy

The establishment of a European environmental policy dates back to the early 1970s, sparked by growing scientific and public concerns over environmental problems and the UN Conference on the Environment in 1972 (EEB, 2010). The Single European Act (1987) was the first treaty that established environmental objectives and principles (cp. Articles 130r-t) as part of the European Community policy. From then on, environmental policy has become firmly entrenched in both primary and secondary EU legislation.

The starting point of a specific European biodiversity policy was marked by the European Community's (EC) ratification of the CBD in 1993. Previous efforts to protect biodiversity were limited to nature protection measures focusing on species, disregarding the other two dimensions of biodiversity. Most noteworthy in this respect are the *Birds Directive*[11] (79/409/EEC) adapted in 1979 and the *Habitats Directive* (92/43/EEC) from 1992. The former obliged Member States to protect, manage, and regulate all birds native to the European territory and their habitats; the latter defined a common framework for the conservation of wild fauna, flora, and natural habitats and established the Natura 2000 network, a system of special areas of conservation throughout the EU.

Following Article 2 of the Maastricht Treaty (1992) which demands the promotion of sustainable growth while respecting the environment, in 1993the European Union adopted the *Fifth EAP* (European Council Resolution of 1 February 1993). Covering the period from 1992 to 2000 it is the first EAP that makes provisions for the subject of nature and biodiversity protection, stressing the importance of biodiversity for ecological balance and the value of genetic diversity for science. It establishes the target to preserve biodiversity "through sustainable development and management in and around natural habitats of European and global value: and through control of use and trade of wild species" (ibid.). In this context, it is interesting to mention the concept of Environmental Impact Assessment (EIA) because of its significance for the implementation of the environmental objectives as laid down in Article 130r-t of

[11] The *Birds Directive* is the oldest EU legislative text regarding nature. It was replaced in 2009 by the so called *Wild Birds Directive* (2009/147/EC).

the Maastricht Treaty. The EIA is a method to assess a planed project's (e.g. construction of motorways, dams, airports, or mining facilities) potential impacts on the environment, including biodiversity, that has to be conducted before its official approval[12].

The first comprehensive strategy relating to biodiversity was developed in response to the EU's obligation under the CBD. Three main initiatives are of importance: the 1998 *European Community Biodiversity Strategy* (COM (1998) 42 final), the subsequent 2001 *Biodiversity Action Plans* (Decision 1600/2002/EC), and the *Commission Communication on Halting Biodiversity Loss by 2010 – and Beyond: Sustaining ecosystem services for human well-being* (COM (2006) 216 final) with its new *Biodiversity Action Plan* (SEC (2006) 621).

2.3.1 1998: European Community Biodiversity Strategy

In order to fulfil the obligations under Article 6 of the CBD[13] in 1998, the European Commission issued a *Communication on a European Community biodiversity strategy* (COM (1998) 42 final), proposing a general policy framework and the creation of adequate measures and instruments to combat biodiversity loss. The *Biodiversity Strategy* is embedded in the *Fifth Environmental Action Programme* (Decision 2179/98/EC) and builds on the commitment to integrate environmental concerns into sectoral policies under Article 130r (2) of the Treaty of Amsterdam. The Commission states that biodiversity is "essential to maintain life on earth and has important social, economic, scientific, educational, cultural, recreational and aesthetic values." (COM (1998) 42 final: 1) The objective is to anticipate and prevent significant reduction in or loss of biodiversity within and beyond the EU's territory by tackling its root causes.

In accordance with the scope of the CBD, four major themes are identified: (1) conservation and sustainable use of biodiversity, (2) sharing of benefits arising out of the utilisation of genetic resources, (3) research, identification, monitoring, and

[12] Since 1985, the EU has a directive on the topic of EIA; it was last amended in 2003 (2003/35/EC).

[13] "Each Contracting Party shall, in accordance with its particular conditions and capabilities: (a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, *inter alia*, the measures set out in this Convention relevant to the Contracting Party concerned; and (b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies." (Article 6 CBD)

exchange of information, and (4) education, training, and awareness. In addition, the Commission specifies eight fields of action and corresponding sub-objectives (conservation of national resources, agriculture, fisheries, regional policies and spatial planning, forests, energy and transport, tourism, development, and economic co-operation). By means of action plans those biodiversity issues should be integrated into sectoral and cross-sectoral policies.

2.3.2 2001: Biodiversity Action Plans

Three years after the *EC Biodiversity Strategy* was adopted, the required biodiversity action plans were established (COM (2001) 162 final). They consist of four individual plans in the areas of (1) conservation of natural resources, (2) agriculture, (3) fisheries, and (4) economic and development co-operation. They were developed in order to complement existing legal provisions and to translate the *Biodiversity Strategy's* objectives into specific actions. As for the other fields of activity, the Commission decided to deal with them on an individual basis within existing frameworks and legislation (such as the Common Agricultural Policy (CAP)).

The *Action Plan for the Conservation of Natural Resources* encompasses four major objectives: conservation of wild fauna and flora, preventing biodiversity loss related to the management of water, soil, forests, and wetlands, reversing biodiversity loss across the EU's territory, and conserving biodiversity worldwide. With regards to the first two objectives, the provisions build on several EU directives, in particular the *Birds, Habitats* and *Water Framework Directive* (79/409/EEC, 92/43/EEC, 2000/60/EC).

The *Action Plan for Agriculture* focuses on the conflict laden relationship between biodiversity and agriculture and establishes priority issues and instruments, inter alia to reduce intensive farming and to prevent the spreading of invasive alien species. Similarly, the *Action Plan for Fisheries* develops priority activities in order to maintain or restore biodiversity threatened by fishing or aquaculture. These include the application of the precautionary principle[14] and sustainable use of fish stocks.

[14] The precautionary principle entails that actions deemed necessary to protect the environment cannot be delayed on grounds of a lack of full scientific knowledge when there are reasons for concern about potentially irreversible effects (COM (2000) 1 final). However, there is no explicit definition of the precautionary principle in EU legislation.

Finally, the *Action Plan for Economic and Development Co-operation* is linked to the UN Millennium Development Goals[15] agreed for 2015. The plan establishes guiding principles such as stakeholder participation, sharing of costs and benefits, and public access to information to be applied within three fields of context: intensive productions systems, production systems involving non-domesticated or non-cultivated species and protected areas.

2.3.3 The Sixth Environmental Action Programme and the 2010-Target

At the European Council held in Gothenburg in June 2001, EU Heads of State agreed that "biodiversity decline should be halted with the aim of reaching this objective by 2010." (Presidency Conclusions, Göteborg European Council 15 and 16 June 2001: 8) The so called 2010-target was adopted first in the *EU Strategy for Sustainable Development* (COM (2001) 264 final) and then included in the *Sixth EAP* (Decision 1600/2002/EC), which also sets out priority actions regarding the implementation of the *Biodiversity Strategy and Action Plans* or the promotion of research.

Modelled after the EU initiative the CBD and the World Summit on Sustainable Development[16] in 2002 endorsed a global 2010-target "to achieve [...] a signification reduction of the current rate of biodiversity loss at the global, regional and national level" (CBD, 2010a).

2.3.4 2006: Biodiversity Action Plan

In May 2006, the European Commission issued the *Communication on Halting the Loss of Biodiversity by 2010 – And Beyond: Sustaining ecosystem services for human well-being* (COM (2006) 216 final) with the annexed *EU Action Plan to 2010 and Beyond* (SEC (2006) 621) in reaction to the insufficient implementation of the biodiversity strategy that endangered the achievement of the 2010-target. The Commission acknowledges that the measures employed so far have not been able to slow down sufficiently, let alone halt the decline of biodiversity in Europe. Therefore, the Commissioners demand to reinforce efforts at Member State and Union level. Prior to presenting the new *Biodiversity Action Plan* (BAP) with its key policy areas for action, the Communication outlines the problem of biodiversity loss

[15] The UN Millennium Development Goals (MDG) were adopted in the form of the United Nations Millennium Declaration in September 2000. For more information on the eight MDGs please refer to UN (2000).

[16] Subsequently, the 2010-target has been included in the Millennium Development Goals (CBD, 2010a).

and reviews previous actions. It stresses the intrinsic value of biodiversity and the importance of ecosystem services for human well-being as the major rationales for protecting biodiversity. Habitat fragmentation, degradation, and land use changes are identified as the major drivers of biodiversity loss in the EU together with over-exploitation, invasive alien species, and pollution (conforming with the MEA's findings; cp. Ch. 2.1). In addition, the Communication highlights the impact of unsustainable land use and climate change on biodiversity.

The new *Action Plan* encompasses four key policy areas, ten priority objectives, and four supporting measures. It introduces a new, more comprehensive policy approach than the previous action plans. For the first time, the emphasis is on both the role of and the relationship between EU and Member States and measures are coupled with a fixed timeframe.

The four key policy areas set out in the annex of the Communication comprise: (1) Biodiversity in the EU, (2) The EU and global biodiversity, (3) Biodiversity and climate change, and (4) The knowledge base. Those policy areas are further subdivided into priority objectives, targets, and sub-targets each with regard to Community level and Member States action. Table 2 gives an overview over policy areas, objectives, and supporting measures.

Finally, the Communication stresses the importance of a functioning monitoring process. Therefore, it proposes an annual report on the implementation of the action plan to the European Council and Parliament. The Communication was adopted by the European Council in 2006 but without the annex containing the new BAP.

Table 2 The 2006 Biodiversity Action Plan: Policy Areas and Objectives[17]

Policy Area	Objectives
I Biodiversity and the EU	1) To safeguard the EU's most important habitats and species 2) To conserve and restore biodiversity and ecosystem services in the wider EU countryside 3) To conserve and restore biodiversity and ecosystem services in the wider EU marine environment 4)To reinforce compatibility of regional and territorial development with biodiversity in the EU 5) To substantially reduce the impact on EU biodiversity of invasive alien species and alien genotypes
II The EU and global biodiversity	6) To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services 7) To substantially strengthen support for biodiversity and ecosystem services in EU external assistance 8) To substantially reduce the impact of international trade on global biodiversity and ecosystem services
III Biodiversity and climate change	9) To support biodiversity adaptation to climate change
IV The knowledge base	10) To substantially strengthen the knowledge base for conservation and sustainable use of biodiversity, in the EU and globally
Supporting Measures	1) Ensuring adequate financing for biodiversity 2) Strengthening EU decision-making for biodiversity 3) Building partnerships for biodiversity 4) Building public education, awareness and participation for biodiversity

2.3.5 Situation Today and Post-2010 Strategy

Over the years, the EU has continuously increased its efforts to combat biodiversity loss both within the EU and globally. Today, the EU pursues one of the most comprehensive and ambitious approach to biodiversity policy. However, at the beginning of 2011, it is apparent, that despite all strategies and action plans, the EU has failed to achieve the 2010-target.

[17] Source: Author's design based on COM (2006) 216 final.

As indicated by the findings of the *Eurostat Monitoring Report of the EU Sustainable Development Indicators*[18] (2009), progress has only been made in some fields. While protected areas in the EU-15 have reached 96 percent sufficiency in 2007, both biodiversity headline indicators show deterioration. The abundance and diversity of common birds has stabilised since 2000, however, the situation of farmland birds has worsened. Even more serious is the condition of European fish stocks: in 2006 21 percent of total fish catches were outside safe biological limits (Eurostat, 2009).

Therefore, in a process that has already been initiated in 2006, European Commission, Council, and Parliament are currently debating a vision for a post-2010 biodiversity policy. In early 2009, when it became clear that the 2010-target would not be met, the European Commission organised a conference uniting representatives of all stakeholders (national governments, business, international organisations, non-governmental organisations, scientists, and interest groups) in an attempt to address the main issues and options for future action (Messages from Athens, 2009). First options for a post-2010 biodiversity strategy were proposed by the European Council in January 2010 (COM (2010) 4 final), and the new long- term vision and mid-term headline target to protect, value, and restore biodiversity in the EU by 2050 and to halt its loss by 2020 was adopted in March (Council Conclusions 25 and 26 March 2010). The final version of the new post-2010 biodiversity strategy is expected to be adopted in spring 2011 after the text has been adapted to the commitments the EU agreed on during the Tenth Conference of the Parties (COP) of the CBD[19] in October 2010.

3. Rationales of EU Biodiversity Policy

Despite popular notions, it is not immediately obvious if and why the loss of biodiversity poses a problem for humanity. Three different points of view dominate the public and scientific debate. While the most common argument, brought forward by environmentalists, concerns the problem of species extinction, policymakers and scientists frequently emphasise the ecological value of biodiversity for the stability of

[18]The *Renewed EU Sustainable Development Strategy* (European Council, 2006) contains a section on environmental protection and lists halting the loss of biodiversity under the operational objectives.

[19] For more information on COP 10 please refer to http://www.cbd.int/cop10/doc/

ecosystems and the economic value of ecosystem services and natural resources (Brand et al., 2008). Finally, there is also a group of people that does not acknowledge that biodiversity loss is problematic, based on the argument that extinction and change have always been an integral part of earth history and that technological advances can substitute for possible biodiversity losses.

In general, different societies ascribe different values to biodiversity, depending on factors like technology, culture, religion, and economic performance. In the literature, there are numerous types of classification; as an example, the categorisation by Dalmazzone (2008), that builds on the framework developed by Perrings et al. (1995), is presented below. Dalmazzone distinguishes between six sources of value: direct value, indirect value, option value, quasi-option value, bequest value, and existence value. Direct and indirect value represent benefits derived from biodiversity (e.g. wood, domesticated animals), respectively ecosystem services (flood mitigation, climate regulation, drinking water). While the option value relates to keeping natural resources available for future generation, the quasi-option value implies the potential knowledge which can be gained from biodiversity (e.g. pharmaceutically active agents derived from plants). In addition, the bequest and existence value pertain to the importance of conserving biodiversity for future generations and to its intrinsic value (Dalmazzone, 1998).

The rationales behind the EU's commitment to combating biodiversity loss on a national, a European and a global level reflect the public debate and all six types of value according to Dalmazzone can be found. An analysis of the documents that constitute EU biodiversity policy (cp. Chapter 2.2) shows that the EU provides four arguments in favour of biodiversity protection:

- intrinsic value of biodiversity
- anthropocentric value of biodiversity and ecosystem services
- legal obligations
- responsibility towards EU citizens

As a Contracting Party to the CBD, the EU endorses the recognition of biodiversity's intrinsic and anthropogenic value made in the preamble of the convention. It even adopts the exact formulation of the "social, economic, scientific, educational, cultural, recreational and aesthetic value of biodiversity" (COM (1998) 42 final: 1) as well as of biodiversity's importance for maintaining life on earth in the *European*

Community Biodiversity Strategy from 1998. Furthermore, the strategy refers to the legal obligations the EU assumes under the CBD. In addition, the Communication mentions "expectations and aspirations of [EU] citizens" (COM (1998) 42 final: 2) as motivation for the commitment to biodiversity. The Commission argues that as representatives of the EU's population it is their duty to act in their interest which includes "the proven economic and environmental values of biodiversity [and] the ethical principle of preventing avoidable extinction" (COM (1998) 42 final: 2).

While this first document already mentions all four rationales for an EU biodiversity policy it does present them disjointedly. In contrast, the 2006 BAP chooses a more coherent approach to the subject. In the first paragraph the Commission justifies the biodiversity policy by stressing the "intrinsic value of nature" (COM (2006) 216 final: 3) and the relevance of biodiversity for "sustainable development [...], competitivity, growth and employment, and improved livelihoods" (ibid.). In addition, the entire second section of the Communication is dedicated to further elaborating on two key arguments: the intrinsic and anthropogenic value of biodiversity. The justification of the intrinsic value-argument is twofold: first, it invokes the idea that humans are part of nature and thus are not entitled to destroy their own and others' livelihood on ethical grounds. Second, biodiversity is viewed as a source of pleasure and inspiration as well as an essential part of recreational and touristic activities. The anthropogenic value-argument is based on the economic benefits derived from biodiversity and ecosystem services in particular. Although most of those benefits are not directly quantifiable in money, biodiversity and ecosystem are indispensable for human life with an estimated value of several hundreds of billions of Euros per year. In this context, the Communication invokes the concept of sustainability[20] by highlighting that those benefits must be preserved both for present and future generations. The Communication refers especially to their importance for "EU growth, jobs and wellbeing" (ibid.: 4) and the realisation of the MDG in developing countries. Finally, in response to the critics of biodiversity protection the paper argues that technological progress cannot compensate sufficiently for detriments caused by biodiversity loss and that conserving biodiversity is cheaper than restoring it.

[20] The term sustainability originally refers to the capacity of a system to endure. Today it is usually used in the sense of sustainable development defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (1987) by the Brundtland Commission.

4. Analysis of EU Biodiversity Policy

The analysis of EU biodiversity policy focuses on the latest documents dealing with the achievement of the 2010-target: the *Communication on Halting the Loss of Biodiversity by 2010 – And Beyond: Sustaining ecosystem services for human Well-being* (COM (2006) 216 final) and *EU Action Plan to 2010 and Beyond* (SEC (2006) 621).

4.1 The Method: SWOT Analysis

The assessment of the biodiversity policy of the EU is based on a SWOT analysis. The acronym SWOT stands for strengths, weaknesses, opportunities, and threats. Strengths are defined as positive aspects, distinctive attributes or competencies which provide a significant advantage. Weaknesses, therefore, are negative aspects or deficiencies which limit effectiveness. Opportunities consist of favourable conditions arising from the changes in the external environment while threats consist of unfavourable conditions (Mullins, 2010). The literature divides the four characteristics into business factors (strengths, weaknesses) and environmental factors (opportunities, threats) (Schneider, Minning, & Freiburghaus, 2007).[21] Graphically, a SWOT analysis can be presented in three ways: in the form of a simple list, a profile or a matrix. The matrix form is the most common format: not only does it present strengths, weaknesses, opportunities, and threats, it also seeks to link them in order to develop and compare strategy options (ibid.). A typical SWOT matrix can be found in Table 3.

Table 3 SWOT-Matrix

	Opportunities	Threats
Strengths	SO-Strategy	ST-Strategy
Weaknesses	WO-Strategy	WT-Strategy

The four possible strategy options resulting from combining business and environmental factors are:

a) SO-Strategy: utilising strengths in order to seize opportunities (ideal case)
b) WO-Strategy: transforming weaknesses into strengths in order to seize opportunities

[21] Other authors distinguish between internal and external factors. See for example Bruhn (2010).

c) ST-Strategy: utilising strengths in order to counter threats
d) WT-Strategy: minimising weaknesses in order to counter threats (worst case)

(Schneider et al., 2007)

Though originally an economic instrument, the concept of SWOT analysis is not limited to business ventures but can in fact be applied to every decision-making situation. Therefore, it can also be adapted to policy analysis and is thus suited to assess the EU biodiversity policy.

Within the context of this thesis, the SWOT analysis is conducted only partially. The assessment of the policy with regard to its strengths, weaknesses, opportunities and threats will be carried out. However, subsequent strategy options will not be developed.

4.2 Strengths

Previous initiatives of the EU in the field of biodiversity policy exhibited several shortcomings, mainly concerning prioritisation, sectoral integration and monitoring (Herkenrath, 2010). The 2006 BAP attempts to address those problems.

For the first time, an action plan not only specifies objectives and headline targets but also provides a detailed catalogue of 154 sub-targets and priority actions. [22] The ten priority objectives cover a wide range of biodiversity-related issues from conserving nature and ecosystem services to controlling invasive alien species and strengthening the knowledge base. In addition, the four key supporting measures focus on funding, decision-making procedures, partnerships, and generating public awareness. Finally, the BAP puts more emphasis on monitoring, evaluation, and review processes. On the whole, the BAP sets out an extensive schedule that factors in the key drivers of biodiversity loss on both EU and global levels. Its comprehensiveness is therefore one of its greatest strengths.

On Member State level the BAP has helped to increase political and public awareness of biodiversity. The extensive reporting process, in particular, provides a thorough synopsis of biodiversity and related policies on both national and EU level, leading to improved actions by national authorities (Herkenrath, 2010).

The revision and strengthening of the reporting and monitoring process constitutes a significant improvement compared to previous strategies and action plans. The BAP obliges the European Commission to report annually on the state of implementation

[22]The 2006 BAP (SEC (2006) 621) can be found in the Annex.

and to provide a mid-term and final assessment[23] in 2008 and 2010 respectively. Moreover, the BAP requires the adoption of a set of indicators in order to measure progress towards policy targets. The *Streamlining European 2010 Biodiversity Indicators* (SEBI 2010) were developed by the EEA (2007), based on a pan-European initiative. And in 2010 the *EU 2010 Biodiversity Baseline* (2010) provided a first indicator-based evaluation of progress towards the 2010-target.[24]

A fourth strong point of the BAP pertains to the first objective "to safeguard the EU's most important habitats and species" (SEC (2006) 621: 2) under the *Habitats and Birds Directives* (79/409/EEC; 92/43/EEC). Though the Natura 2000 network has not yet been completed, its over 26,000 special areas of conservation already cover 18 percent of EU territory (COM (2010) 548 final) which makes it the world's largest network of protected areas (COM (2010) 4 final).

Table 4 Strengths

1) comprehensiveness of the approach
2) increase in political and public awareness of biodiversity and the BAP in Member States
3) improvement of the monitoring and reporting process
4) conservation of habitats and species under the Natura 2000 network

4.3 Weaknesses

Despite the BAP's achievements, the list of its weaknesses exceeds its strengths. The Commission itself admits several deficiencies in the design and implementation of the BAP in a *Communication on Options for an EU Vision and target for biodiversity beyond 2010* (COM (2010) 4 final).

The BAP's seven major weaknesses relate to (1) policy gaps, (2) integration gaps, (3) implementation gaps, (4) knowledge and data gaps, (5) comprehensiveness and quality, (6) a lack of funding, and (7) a lack of political support.

Policy and integration gaps are the main contributors to the failure of the BAP. In terms of policy, the action plan – in spite of its comprehensiveness – neglects to adequately address several important aspects, most notably the issues of soil protection and the negative impact of invasive alien species. To date, the EU has not been able to reach legal agreements on those subjects even though they are addressed

[23] Compare COM (2008) 864 final and COM (2010) 548 final.

[24] A comprehensive description of SEBI 2010 and the Biodiversity Baseline would exceed the scope of this thesis. For more information refer for example to http://biodiversity-chm.eea.europa.eu/information/indicator/F1090245995.

specifically under objectives 2 and 5: both the proposed *EU Strategy on Invasive Species* and the *Framework Directive on Soil Protection* are still under development (COM (2010) 548 final). Furthermore, while the conservation of biodiversity and ecosystem services within protected areas is rather successful (cp. Ch. 4.2) the BAP lacks sufficient measures for preservation outside of Natura 2000 sites (COM (2010) 4 final). In addition, the *Action Plan* takes only little account of the topics of sustainable investments, production, and consumption although they feature prominently as objectives under Article 6 of the *Sixth EAP* (Decision 1600/2002/EC).

Closely linked with this is the lack of effort the BAP makes to integrate biodiversity matters into other sectoral policies. In this context, the field of agriculture is of special importance due to its significance for the EU and its great impact on biodiversity. The CAP is the most influential policy tool in this case. Although there have been some improvements concerning the integration of biodiversity concerns into agricultural policy[25], there are still many fields in which biodiversity protection conflicts with the interests of agricultural economy. One example is the prevalence of monocultures. In contrast to past times when farmers cultivated diverse, native plants and practised crop rotation, nowadays the range of crop variety has decreased considerably in order to increase crop yields and profits. Monocultures have become the norm not only in Europe but worldwide. On the downside, those developments threaten not only the genetic diversity of crop plants but also the resilience of farmland ecosystems (e.g. increasing the risk of soil depletion, erosion, and pests).

The main reason for the integration gaps lies with the governance structure at EU and national level. The vast number of responsible authorities and the resulting fragmentation aggravate the implementation of the BAP, because it makes it difficult to gain relevant data and information as well as to coordinate actions between the different departments involved (Herkenrath, 2010).

The integration gaps are usually accompanied by implementation gaps. For example, while the establishment of terrestrial Natura 2000 sites is almost completed (cp. Ch. 4.2), the level of protection of marine biodiversity and ecosystem services is far lower. Many commercial fish stocks, for instance, are still fished outside safe biological limits (EEA, 2009). There are manifold reasons as to why EU and

[25] Compare, for example, the introduction of compulsory cross-compliance for subsidies granted under the CAP (Council Regulation (EC) no. 72/2009).

Member States have not been able to implement the provisions of the BAP. One is the aforementioned fragmentation of responsibilities. Another problem relates to knowledge and data gaps. Even though the knowledge base on biodiversity and ecosystem services has been enhanced as a result of the actions under objective 10 of the BAP, serious deficiencies still exist. Especially the functioning of ecosystem services and their value has yet to be further investigated.

Moreover, due to the topic's complexity developing indicators to assess the state of biodiversity and ecosystem services is difficult. Nevertheless, it is necessary to define quantifiable targets and establish measures and a baseline to monitor changes over time. In order to control progress, there has to be an initial value against which change can be observed. However, the BAP sets up neither indicators nor means of verification and measurable targets which makes it almost impossible to ascertain development (Herkenrath, 2010). Rather than specifying target values for protection statuses or committing to fixed rates of reduction of negative impacts the BAP formulates only general, non-quantifiable goals. The failure to provide adequate instruments is one of the weaknesses that greatly hampers the EU's efforts to protect biodiversity. It must be mentioned, though, that since then the EU has made progress concerning the generation of biodiversity-related knowledge and data. The EEA developed and presented the *EU 2010 Biodiversity Baseline* (2010), the first comprehensive compilation of data on the state and trends of biodiversity and ecosystem services. The baseline builds on data gathered under the *Birds and Habitats Directives* (92/43/EEC; 79/409/EEC) as well as under the SEBI 2010 initiative and provides a reference point for future post-2010 target actions. In addition, the EEA launched the *Biodiversity Information System for Europe* (BISE), an online information portal that presents all information and data available.

The degree of comprehensiveness that the BAP shows can be considered not only a strength but also a weakness: with over 150 actions it is debatable whether all of them are equally important and pressing, an opinion that was also voiced by the European Economic and Social Committee (EESC) (2007). A lack of prioritisation poses the threat of underestimating the seriousness of situations and hence giving less critical issues preference over urgent matters. The EESC further points to the fact that the BAP focuses primarily on implementing existing instruments instead of contriving new methods and tools. The planned actions, therefore, are often too unspecific and not flexible enough to react properly to current and future challenges.

Take, for example, the problems associated with renewable energies and biofuels. Although by now the issue features prominently on the EU agenda, it plays only a marginal role in the BAP which aggravates the process of developing effective strategies. To sum up, the action plan lacks in quality in some parts with regard to how specific and relevant its actions are.

Another fundamental weakness, that has also been criticised by many parties and institutions concerned, are discrepancies between funding needs and funding sources. There are several sources of Community funding dedicated to biodiversity, inter alia the European Agricultural Fund for Rural Development, the European Development Fund, the European Fisheries Fund, and LIFE+[26]. What the action plan lacks is a clear assignment of funds for specific tasks. There is, for instance, up to date no separate budget for the implementation of the BAP. Additionally, it is difficult to obtain accurate data on how much money has been spent by Member States on BAP related actions, because there is no common recording practice (COM (2010) 548 final). A study on *The Economics of Ecosystems and Biodiversity* (TEEB) hosted by the UNEP indicates, for example, that in 2009 EU financing covered only 20 percent of the costs for the management of Natura 2000 sites (TEEB, 2009).

Finally, the BAP suffers from a severe lack of political support, especially by the Council of the EU. For one thing, the Council has adopted only the *Communication on Halting the Loss of Biodiversity by 2010 – and Beyond: Sustaining ecosystem services for human well-being* (COM (2006) 216 final), but not the annexed actual *Action Plan*. Thus, the BAP refrains from being legally binding for the Member States.

Table 5 Weaknesses

1) policy gaps
2) integration gaps
3) implementation gaps
4) knowledge and data gaps
5) comprehensiveness, quality vs. quantity
6) lack of funding
7) lack of political support

[26] The LIFE programme is an EU funding source for supporting environmental projects in order to contribute to the implementation of EU environmental policy and legislation. For more information refer to http://ec.europa.eu/environment/life/index.htm

4.4 Opportunities

Aside from the internal factors that determine the strengths and weaknesses of the BAP, there are a few favourable external conditions that provide opportunities for the future of EU biodiversity policy.

First, scientific progress is made progressively. Long-term studies such as TEEB offer new insights into the research fields of biodiversity and ecosystem services and generate valuable knowledge that could be used to improve actions, tools, and measures for biodiversity maintenance. A broader knowledge base gives the EU the opportunity to rectify weak points of the 2006 BAP, for instance by setting up quantifiable targets, indicators, and baselines.

Second, progress concerning the valuation of biodiversity and ecosystem services is being made. Although data and records are still incomplete the current state of knowledge suffices to make qualitative statements about conservation statuses and trends (EEA, 2010). According to TEEB estimates (2008), welfare costs due to the loss of ecosystem services amount to EUR 50 billion annually for the period from 2000 till 2050. The cumulative welfare losses are expected to account for 7 percent of annual consumption by 2050. Awareness of economic losses caused by insufficient biodiversity protection could increase the pressure on relevant actors and stakeholders on EU and Member State level.

Third, the potential of EU citizens is not yet exhausted. Societal developments and EU and national education campaigns increase public awareness of biodiversity. In the form of non-governmental organisations and interest groups, the EU's population could be capable of exerting great influence on the policy-making process.

A fourth opportunity could be seen in the close relationship between climate change and biodiversity. Climatic changes have a strong impact on biodiversity (CBD, 2010b). Warming temperatures, for example, lead to desertification and thus to the destruction of entire ecosystems. At the same time, healthy ecosystems can help alleviate effects of climate change. Nevertheless, in the past, policy-makers have seemed to ignore the link between those two environmental problems albeit it being one of the BAP's policy areas. The urgency of the issue of climate change and the ongoing post Kyoto Protocol negotiations could provide a platform for emphasising biodiversity concerns.

Table 6 Opportunities
1) scientific progress
2) valuation of biodiversity and ecosystem services
3) social developments
4) close relationship between climate change and biodiversity

4.5 Threats

External developments can also have unfavourable impacts and thus become a threat to EU biodiversity policy.

The political situation, both at Member State and EU level plays the most important role in terms of policy-making processes. It are the EU institutions that create biodiversity policy and it is in their power to determine the level of ambition. As the past has shown, EU biodiversity policy lacks strong political support that goes beyond declarations of intent. A further reluctance of the Council of the EU to strengthen the emphasis on biodiversity issues and to adapt legally binding measures could seriously impede the maintenance of an adequate status of biodiversity and ecosystem services.

Another factor that could pose a threat to EU biodiversity policy is the economy. The possible negative influences are twofold: on the one hand, there are general economic rationales that conflict ostensibly with conservation efforts, and on the other hand, the EU and its Member States have suffered from the recent financial and economic crisis. Though the welfare losses caused by a decline of biodiversity loss are known better and better, it seems that politicians still adhere to short-term economic objectives – neglecting largely the long-term benefits provided by biodiversity and ecosystem services as well as a generally sustainable economic order (an argument which is also brought forward by the EESC (2010)). Financial and economic turmoil, as brought about by the latest global crisis, usually promote an environment that favours the recovery of economic stability over everything else. Environmental concerns such as biodiversity protection could decline in significance in the face of unemployment and economic recession.

In the EU context one has to consider the influence of pressure groups and lobbying. The lobby in biodiversity-relevant fields such as the agriculture or energy sector is strong and well-organized, exerting a great deal of pressure on the policy-making process at EU and Member State level. Again, as is the case with economic

rationales, there is a conflict between profit-orientation and biodiversity protection that could affect negatively the content of a future EU biodiversity strategy.

At last, the role of the public is one of importance. While it is possible that the EU population could help to advance the issue of biodiversity protection (cp. Ch. 4.4), it is just as probable that it will remain comparatively inactive. A Eurobarometer[27] survey (2007; 2010) found, that although two-thirds of the respondents were familiar with the term "biodiversity", about half of them did not understand the concept. Moreover, as the survey was conducted in two waves in 2007 and 2010, the findings show that knowledge on biodiversity has increased only fractionally (Eurobarometer, 2010). At the same time the percentage of EU citizens that feel not well informed on biodiversity loss in the EU remained at 60 percent (Eurobarometer, 2010). The results of the Eurobarometer suggest that a large part of the EU population is aware of the issue but that it lacks the thorough understanding that is essential for effective civic involvement.

Table 7 Threats
1) political situation
2) economic situation
3) pressure groups and lobbying
4) lack of public awareness and involvement

[27] The Eurobarometer is a panel of surveys that is regularly carried out in EU Member States by order of the European Commission. For more information please refer to http://ec.europa.eu/public_opinion/index_en.htm.

Table 8 summarises the findings of the SWOT analysis.

Table 8 SWOT: 2006 Biodiversity Action Plan

Strengths	Weaknesses
1) comprehensiveness of the approach 2) increase in political and public awareness of biodiversity and the BAP in Member States 3) improvement of the monitoring and reporting process 4) conservation of habitats and species under the Natura 2000 network	1) policy gaps 2) integration gaps 3) implementation gaps 4) knowledge and data gaps 5) comprehensiveness, quality vs. quantity 6) lack of funding 7) lack of political support
Opportunities	**Threats**
1) scientific progress 2) valuation of biodiversity and ecosystem services 3) social developments 4) close relationship between climate change and biodiversity	1) political situation 2) economic situation 3) pressure groups and lobbying 4) lack of public awareness and interest

5. Recommendations

As the previous chapter has shown, the progressive decline of biodiversity in Europe is not primarily the result of non-compliance with EU biodiversity policy and law, but rather a consequence of deficiencies in the design of said policy. To a great extent the BAP's means do not match the targets and it lacks a stringent timetable with quantifiable short-term and final targets.

So far, a new post-2010 biodiversity strategy has not yet been adopted (cp. Ch. 2.3.5) but the European Council has already endorsed the long-term vision to protect, value, and restore EU biodiversity and ecosystem services by 2050 and the headline target "of halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020" (Environment Council Conclusion 15 March 2010: 4).

The following chapter presents several recommendations for how the post-2010 EU biodiversity policy could be redesigned.

First, it is essential that a new biodiversity strategy effectively integrates biodiversity into other sectoral policies. A lack of policy coherence was one the 2006 BAP's greatest flaws as it lead to (sometimes inadvertent) counterproductive actions that increased the pressure on biodiversity and ecosystem services instead of fostering their protection. Commission (COM (2010) 4 final), European Parliament (2010),

European Council (2010), and the European Economic and Social Committee (2010) have reiterated the importance of mainstreaming biodiversity into all EU policy areas. In contrast to the last BAP, it would be advisable to specify means of integration more clearly. Another conceivable option would be to define objectives that promote embedding biodiversity in other policies, such as the CAP.

Against this backdrop, it is also important that the post-2010 biodiversity policy is given legal force. Together with actions that are legally binding on all EU institutions and Member States, an unequivocal distribution of responsibilities and sanctions for non-compliance could be introduced to ensure a proper and timely implementation. Moreover, it would send out the clear message to both political actors and the public that biodiversity protection is, in fact, high on the agenda of the EU.

Concerning structure and content, the EU biodiversity policy needs a clear framework, coupled with an action plan that includes a fixed schedule, explicit and quantifiable targets, as well as adequate measures and indicators (Herkenrath, 2010). Quality should be given priority over quantity, by reducing the number of actions in favour of a smaller, albeit specialised and prioritised, package of measures. A close co-operation between policy and science could help to optimise the goal-setting process. Drawing on new scientific knowledge targets could be defined so as to aim at achieving certain outcomes, status or level of protection. In *The Message from Athens* (2009) the Commission therefore supports the UNEP proposition to establish an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) similar to the Intergovernmental Panel on Climate Change (IPCC).

In reaction to the criticism voiced, for example, by Herkenrath (2010) and by the EESC (2010), a new biodiversity policy should take a more "forward-looking approach" (Herkenrath, 2010: 43) by developing new instruments that are targeted more closely at the respective objectives. Policy tools should furthermore be designed more flexible in order to be able to adapt to any newly arising problems. Concerning the content, the issues of invasive alien species and soil protection should be addressed more thoroughly, because so far the EU has not yet managed to come up with effective solutions to those problems.

Though efforts have been made during the last years, it is still necessary to further promote and support research in the field of biodiversity and ecosystem services. Studies such as TEEB and the establishment of the EU 2010 Biodiversity Baseline are first steps in the right direction. The IPBES (in case it is established) could

provide valuable contributions to broadening the knowledge base as well as reaching scientific consensus on biodiversity and ecosystem services. Scientific uncertainty has proven to be an obstacle in relation to environmental challenges like biodiversity loss and climate change, not only because of the lack of knowledge but also because opponents utilise this fact as an argument against protection efforts. According to their line of reasoning, it is unnecessary to conserve biodiversity as long as there is no full scientific proof of the merits of conservation.

Furthermore, closing knowledge gaps could also help to raise public awareness. As pointed out in Chapter 4.5, the Eurobarometer (2010) revealed that although the majority of EU citizens is sensitive to the problem of biodiversity loss, understanding of the actual ecological processes and relevant terms remains insufficient. In order to achieve a higher level of societal involvement and support for political actions, the EU should step up efforts concerning education programmes. The EU campaign "Biodiversity – we are all in this together"[28], for example, (launched in March 2010 on the occasion of the International Year of Biodiversity) could be extended and accompanied by large-scale national campaigns. Through the use of new media such as social networks and blogs an even greater audience could be reached and encouraged to get involved, in particular young Europeans.

The positive effects of public involvement could be further reinforced by taking a participatory approach to biodiversity policy, effectively including all stakeholders at local, national, and EU level in the policy-making process. Participation is voluntary and mainly targeted at economic actors and citizens in their role as consumers. It encompasses actions like voluntary agreements between business and the responsible public authorities (Musu, 2008).

Finally, the issue of funding should be addressed more systematically. Funding sources could be allocated to specific funding needs, so as to develop a clear financing framework. Together with an improved reporting system, this would help to gain valid data on how much Member States spend on biodiversity-related actions and to identify funding gaps. Current figures suggest that the budget allotted for biodiversity policy is too small to ensure an effective implementation. Therefore, it is likely that the EU needs to seek and to make available additional sources of finance.

[28] For more information on the campaign please refer to http://ec.europa.eu/environment/-biodiversity/campaign/.

Many of the aforementioned recommendations are presently discussed by the EU institutions. Up to date it remains unclear, however, if and which suggestions will be taken into consideration for the post-2010 biodiversity strategy.

Table 9 Recommendations

1) policy coherence, sectoral integration (esp. CAP, economic and financial ministries), mainstreaming of biodiversity into other EU policies
2) binding legal force
3) clear framework with explicit targets
4) improved goal-setting
5) address the issues of invasive alien species and soil protection
6) research
7) public education and awareness-raising campaign
8) involvement of stakeholders and participatory approach
9) streamlining of funding sources and improved reporting process concerning funding

6. Conclusion

In the previous chapters the EU biodiversity policy, as laid down in the 2006 *Biodiversity Action Plan*, has been introduced and analysed with regard to its effectiveness. After the EU admitted to having failed to realise the 2010-target, it is necessary to ask for the reasons. Therefore, the central research question of this Bachelor thesis is why the EU failed to achieve the target of halting biodiversity loss in Europe by 2010. In order to answer that question a SWOT analysis has been conducted. The focus of the analysis is on the most recent BAP, adopted in 2006 that provides a detailed framework including objectives and a catalogue of actions for EU biodiversity policy. Studying and assessing its strengths, weaknesses, opportunities, and threats offers a comprehensive impression of how the EU approaches the issue of biodiversity loss. In principle, the analysis of the action plan's strengths proves that the responsible authorities (in particular the European Commission) are well-informed and competent concerning the subject matter. The significance of biodiversity for human well-being builds on environmental, economical, emotional, and ethical values. Yet notwithstanding the EU's urgent call to action, the outcome has been unsatisfactory. The BAP's strengths such as the Natura 2000 network of protected areas are minor compared to the list of weaknesses. Possible causes for the lack of effectiveness in reaching the headline target as derived from the SWOT

analysis relate to policy, integration, implementation, knowledge, and data gaps. Further contributory factors are the comprehensiveness of the action plan that favours quantity over quality, funding problems, and a lack of political support. Taking a look at potential opportunities and threats, it remains to be seen if positive or negative influences will prevail. Scientific progress and societal development have the potential to place the issue of biodiversity loss at the forefront of the European consciousness and increase the pressure to act on EU and Member States. Then again, the lack of public awareness and political support coupled with the current economic situation could also have the opposite effect, effectively demoting biodiversity policy to a marginal role. The process of developing a post-2010 strategy shows, that the responsible authorities are well aware of the shortcomings of the current policy. As Janez Potočnik, the European Commissioner for the Environment put it "This is why we urgently need to start seeing biodiversity loss for what it **really** is: a sign of the unsustainability of our societies, and not unavoidable collateral damage as the result of economic evolution." (2010, emphasis in original) The question is, if the EU has learned its lesson or if those statements about the urgency to combat biodiversity loss and to improve the policy will remain mere declarations of intent.

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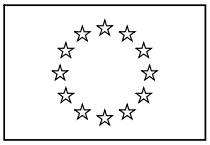
9. Annex

Excerpt: Commission of the European Communities (2006). Technical Annex to the Communication on Halting the Loss of Biodiversity by 2010 – and Beyond: Sustaining ecosystem services for human well-being. SEC (2006) 621.



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 22.5.2006
SEC(2006) 621

COMMISSION STAFF WORKING DOCUMENT

Annexes to the

COMMUNICATION FROM THE COMMISSION

HALTING THE LOSS OF BIODIVERSITY BY 2010 — AND BEYOND
Sustaining ecosystem services for human well–being

{COM(2006)216 final}

TECHNICAL ANNEX

ANNEX 1
EU ACTION PLAN TO 2010 AND BEYOND

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A. THE TEN PRIORITY OBJECTIVES			
POLICY AREA 1: BIODIVERSITY AND THE EU			
OBJECTIVE 1: TO SAFEGUARD THE EU's MOST IMPORTANT HABITATS AND SPECIES.			
HEADLINE TARGET: Biodiversity loss of most important habitats and species halted by 2010, these habitats and species showing substantial recovery by 2013.			
A1.1	**TARGET: Natura 2000 network established, safeguarded, designated and under effective conservation management by 2010, 2012 in marine.**		
A1.1.1	**ACTION:** Accelerate efforts to ***finalise the Natura 2000 network*** including: complete terrestrial network of Special Protection Areas (SPA) [by 2006, 2008 for marine]; adopt lists of Sites of Community Importance (SCI) [by 2006, 2008 for marine]; designate Special Areas of Conservation (SAC) and establish management priorities and necessary conservation measures for SACs [by 2010, 2012 for marine]; establish similar management and conservation measures for SPAs [by 2010, 2012 for marine].	For EU15 - ensure MS which have not proposed sufficient sites complete their lists; adopt remaining lists of SCIs as soon as possible; provide necssary guidance on designation and establishment of management priorities and measures; for EU10 - ensure correct transposition of Birds and Habitats Directives, ensure MS which have not proposed sufficient sites complete their lists; adopt lists of SCIs as soon as possible; provide necessary guidance on designation and establishment of management priorities and measures; publish annual review of progress.	Propose sufficient SCIs; designate SACs; prepare, adopt and implement site management priorities and measures.
A1.1.2	**ACTION:** Ensure ***adequate financing provided to Natura 2000*** implementation from Community sources (notably Rural Development funds, Cohesion and Structural Funds, Pre-Accession Instrument, Life-III, Life+) and MS sources, accessible to those who manage Natura 2000 sites, with focus on optimising long-term conservation benefits as well as priority awareness raising and networking initiatives [2006 onwards].	Establish Community priorities for co-financing under each instrument; provide guidance on co-financing to MS and potential beneficiaries; evaluate MS co-financing programme proposals; disburse funds; monitor effectiveness (in terms of biodiversity outcomes); audit expenditure	Commit adequate national co-financing; identify national priorities for co-financing; develop national programmes for allocation of financing; disburse funds (national and Community) to beneficiaries; monitor cost-effectiveness of actions financed (in terms of biodiversity outcomes); audit expenditure
A1.1.3	**ACTION:** Transpose fully [by 2006] ***Articles 6(2), 6(3) and 6(4) of the Habitats Directive*** into national legislation and planning policies and ensure subsequent timely implementation; where appropriate (i.e. where development proposals cannot avoid damage to Natura 2000 sites, but proceed for reasons of overriding public interest) ensure special effort for adequate design and implementation of ***compensatory measures*** [2006 onwards].	Check and ensure full transposition; address any complaints relating to implementation; establish external technical capacity for evaluting requests for derogations under Article 6(4); provide guidance on compensatory measures; evaluate adequacy of compensatory measures.	Fully transpose and implement Art 6 including: avoid where possible deterioration or disturbance of sites by developmental activities; assess potential impacts of proposed plans or projects likely to have a significant impact on sites, involving general public where appropriate; if deterioration or disturbance likely, assess whether overriding public interest justifies proceeding; if proceeding, take necessary compensatory measures to maintain coherence of network.
A1.1.4	**ACTION:** Strengthen effectiveness of ***Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA)*** in informing decision-making (*inter alia* : take stock of effectiveness, produce guidance, tighten legal requirements as appropriate) so as to prevent, minimise and mitigate damages to Natura 2000 sites [2006 onwards]. (cf *Actions A4.1.4, A4.1.6 and A4.6.1 to A4.6.4)*	Take stock of effectiveness of EIA (2006-07) and of SEA (2008-09) with respect to preventing biodiversity loss, produce guidance on best practice in treatment of biodiversity in SEA and EIA (specific to the directives), consider options to tighten legal requirements (eg. require biodiversity to be addressed at assessment of alternatives, screening, scoping stages) where necessary.	Implement best practice for treatment of biodiversity in SEA and EIA, ensure decision-making takes full account of SEA/EIA findings related to biodiversity including direct, indirect and cumulative impacts.
A1.1.5	**ACTION:** Ensure full and timely application of the ***Environmental Liability Directive*** (ELD) as it applies to protected species and natural habitats (as defined under the directive), including preventive measures and remedial actions, as appropriate [2006 onwards].	Develop guidance, including on compensation required under ELD in respect of damages to Natura 2000 sites.	Apply Directive in line with guidance.
A1.2	**TARGET: Sufficiency, coherence, connectivity and resilience of the protected areas network in the EU substantially enhanced by 2010 and further enhanced by 2013 (*cf objective 9, target 9.4)* .**		
A1.2.1	**ACTION:** Carry out [in 2008, following next reports] scientific review of habitat types listed in annexes of nature directives, informed by 'shadow lists' of priority habitats; add to annexes any missing habitat types of Community interest, and ensure ***all habitat types of Community interest are sufficiently represented in the Natura 2000 network*** [by 2010].	Coordinate review, propose necessary amendments to annexes, assess sufficiency of MS proposals for any new sites in response to any amendments to annexes, adopt revised lists of SCIs where necessary.	Participate in review, adopt (in Council) amendments to annexes, propose new sites as necessary, designate new sites and establish management priorities and measures as soon as possible after adoption of any new lists of SCIs.
A1.2.2	**ACTION:** Accelerate efforts to place ***other designated protected areas (non-Natura 2000) of national, regional and local biodiversity importance*** under effective conservation management [by 2010, 2012 in marine].	Raise awareness of importance and relevance of these areas in context of Action 1.2.3 below	Carry out national review of sufficiency of these areas in context of Action 1.2.3 below, address key shortfalls/gaps.
A1.2.3	**ACTION:** Assess [by 2008] and substantially strengthen [by 2010] ***coherence, connectivity and resilience of the protected areas network*** (Natura 2000 and non-Natura protected areas) by applying, as appropriate, tools which may include flyways, buffer zones, corridors and stepping stones (including as appropriate to neighbouring and other third countries), as well as actions in support of biodiversity in the wider environment (*see also actions under objectives 2, 3 and 9*)	Coordinate assessment, develop guidelines to strengthen coherence	Participate in assessment, apply measures to strengthen coherence and connectivity
A1.3	**TARGET: No priority species in worsening conservation status by 2010; majority of priority species in, or moving towards, favourable conservation status by 2013.**		
A1.3.1	**ACTION:** Implement [2006 onwards], at EC or MS level as appropriate, existing species action or management plans for species under threat and review and update as necessary; elaborate [2006 onwards] and implement [2007 onwards] additional ***species action or management plans*** for a wider range of species under threat - including birds, mammals, reptiles, amphibians, freshwater fish, invertebrates and plants; ensure monitoring of implementation and effectiveness of plans.	Coordinate preparation of EC-level action plans; coordinate implementation at Community level	Implement EC plans at national level, develop and implement national level plans
A1.3.2	**ACTION:** Carry out [in 2008, following next reports] scientific review of species listed in annexes of nature directives, informed by EU 'shadow lists' for major taxa and other relevant assessments of species status; add to annexes any missing species of Community interest, and ensure where appropriate that ***all species of Community interest are sufficiently represented in the Natura 2000*** network [by 2010].	Coordinate review, coordinate monitoring and assessment of species conservation status, support development of EU 'shadow lists' (including Red Data lists), propose amendments to annexes, assess sufficiency of Natura 2000 network in respect of all new species added to annexes.	Participate in review, suggest amendments to annexes

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A1.3.3	**ACTION:** Identify and fill critical gaps in EU ***ex-situ (zoo, botanic gardens, etc.) conservation programmes for wild species,*** in line with best practice, with appropriate co-financing from EC and MS [2006 onwards].	Coordinate assessment, provide co-financing for priority projects	Participate in assessment, co-finance and implement priority projects
A1.4	**TARGET: All above targets applied for Acceding Countries from date of accession.**		
A1.4.1	**ACTION:** Expand all above actions to ***Romania and Bulgaria (Acceding Countries) and to any future Acceding Countries*** in a timely manner, i.e. to provide for full implementation of environmental *acquis* , and provide lists of Natura 2000 sites [by date of accession].	Ensure transposition of nature directives for application from day of accession; ensure lists proposed by day of accession; adopt lists within 1 year of accession.	(***ROMANIA & BULGARIA, and any future Acceding Countries***) Prepare to meet all above targets from day of accession.
A1.5	**TARGET: For those EU Outermost Regions not covered by the nature directives, valued biodiversity sites and species not in worsening conservation status by 2010; majority of valued sites and species moving towards favourable conservation status by 2013.**		
A1.5.1	**ACTION:** Apply nature directives-type approach for valued sites and species in those ***EU Outermost Regions not covered by nature directives*** [2006 onwards].	None	(***FRANCE***) Apply nature directives-type approach (voluntarily and at national initiative) for priority sites and species in DOMs
OBJECTIVE 2: TO CONSERVE AND RESTORE BIODIVERSITY AND ECOSYSTEM SERVICES IN THE WIDER EU COUNTRYSIDE.			
HEADLINE TARGET: In wider countryside (terrestrial, freshwater, brackish water *outside* Natura 2000 network), biodiversity loss halted by 2010 and showing substantial recovery by 2013.			
AGRICULTURAL & RURAL DEVELOPMENT POLICY			
A2.1	**TARGET: Member States have optimised use of opportunities under agricultural, rural development and forest policy to benefit biodiversity 2007-2013.**		
A2.1.1	**ACTION:** Allocate, at MS initiative, within ***each national/regional Rural Development (RD) Programme,*** adequate ***Community and MS co-financing*** to measures available under all three axes of the RD Regulation which are directly or indirectly supportive of nature and biodiversity [2006/07 and any subsequent revisions]. (*cf Action B.1.1.2*)	Assess MS RD Programmes and seek amendments where appropriate.	Ensure adequate MS funds to make up any shortfall in funds provided by EC co-financing
A2.1.2	**ACTION:** Apply ***Rural Development (RD) measures*** in the next programming period [2007-2013] to optimise long-term benefits for biodiversity - in particular for Natura 2000 areas and for other 'high nature value' farm and forest areas.	Provide guidance on application of RD measures, including on identification of high-nature-value farmland, forests and woodlands	Ensure CAP National Strategy Plans and National and Regional RDPs reflect this need
A2.1.3	**ACTION:** Define criteria and identify [2006-07] ***high-nature-value farmland and forest areas*** (including the Natura 2000 network) threatened with loss of biodiversity (with particular attention to extensive farming and forest/woodland systems at risk of intensification or abandonment, or already abandoned), and design and implement measures to maintain and/or restore conservation status [2007 onwards].	Evaluate extent to which Common Agricultural Policy (CAP) National Strategy Plans and National RDPs reflect this need - encourage adjustments where necessary	Define criteria in order to capture all farm and forest land of high value for biodiversity, identify HNV areas, develop measures to address threats
A2.1.4	**ACTION:** Ensure effective implementation of ***cross-compliance*** (which provides a baseline for most of the measures of Axis 2 of the Rural Development Regulation) in ways that benefit biodiversity [2007-2013].	Evaluate extent to which CAP National Strategy Plans and National RD Programmes reflect this need - encourage adjustments where necessary	Ensure CAP National Strategy Plans and National and Regional RDPs reflect this need
A2.1.5	**ACTION:** Ensure that MS Rural Development Plans (RDPs) comply with environmental legislation and in particular with the nature directives so as to ***prevent and minimise any potential damages to biodiversity*** [2007-2013].	Assess whether proposed CAP National Strategy Plans may result in breach of environmental legislation, seek adjustments where necessary	Ensure national plans comply
A2.1.6	**ACTION:** Broaden ***extension services, farm advisory systems and training*** actions to farmers, landowners and farm workers to strengthen biodiversity-related implementation in the next rural development programming [2007 onwards], including support from the LEADER axis.	Evaluate extent to which CAP National Strategy Plans and National RDPs reflect this need - encourage adjustments where necessary	Ensure CAP National Strategy Plans and National and Regional RD Programmes reflect this need
A2.1.7	**ACTION:** Ensure future ***'less favoured area' (LFA) regime*** [from 2010] under Axis 2 enhances its contribution to biodiversity and to 'high nature value' farm and forest areas.	Assess contribution of LFAs to biodiversity, means to enhance this contribution - and reflect this in 2008 report and proposals	Support LFA regime which is more favourable to biodiversity, implement new regime
A2.1.8	**ACTION:** Implement the ***common monitoring and evaluation framework and Strategic Environmental Assessment (SEA) Directive requirements*** where applicable for rural development programmes, including the definition of indicators in a way that impact of measures on biodiversity is assessed [2006 onwards].	Evaluate the extent to which MS have used the mandatory indicators and the appropriateness and adequacy of their additional programme specific indicators	Use mandatory indicators, and draw up additional programme-specific indicators as needed
A.2.1.9	**ACTION:** Encourage that implementation of the ***Common Agricultural Policy first pillar benefits biodiversity*** , notably through mandatory cross-compliance, decoupling (single farm payments) and by encouraging take-up of modulation by the Member States.	Evaluate the extent to which MS have used the first pillar of CAP for supporting biodiversity	Use the instruments of the CAP first pillar (decoupling, cross-compliance) to promote biodiversity actions and increase modulation possibilities and redirection of first pillar resources to biodiversity actions through Rural Development.
A2.1.10	**ACTION:** Consider, if appropriate, a ***possible review of cross-compliance requirements related to the preservation of biodiversity*** in the 2007 review of the cross-compliance system.	Evaluate in 2007, in the context of the foreseen review of cross-compliance	Develop appropriate standards and modalities for cross-compliance, decoupling, modulation
A2.1.11	**ACTION:** Strengthen measures to ensure conservation, and availability for use, of ***genetic diversity*** of crop varieties, livestock breeds and races, and of commercial tree species in the EU, and promote in particular their *in situ* conservation [2006 onwards].	Facilitate (remove obstacles), provide guidance, provide co-financing	Identify and implement measures
A2.1.12	**ACTION:** Exploit opportunities under the CAP [2007-2013] to implement all above actions in the ***Outermost Regions*** .	Evaluate extent to which CAP National Strategy Plans and National RD Programmes (for MS with outermost regions) reflect this need - encourage adjustments where necessary	(***FRANCE, SPAIN, PORTUGAL***) Take account of biodiversity needs in design of CAP National Strategy Plans and National and Regional RD programmes for outermost regions
FOREST POLICY			
A2.1.13	**ACTION:** Ensure that the forthcoming ***EU Forest Action Plan*** [due 2006] addresses forest biodiversity among the priorities, in line with the EU Forest Strategy and the 6th Environment Action Programme.	Propose Action Plan, implement Community-level components	Participate in preparation of Action Plan, implement at MS level
A2.1.14	**ACTION:** Implement ***Vienna Ministerial Conference resolution on forest biodiversity*** (2003) through forest policies of MS and EU Forest Action Plan with particular reference to the CBD Expanded Programme of Work on Forest Biological Diversity [2006 onwards].	Implement Resolution as it applies at Community level	Implement resolution at MS level

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A2.1.15	**ACTION:** ***Assess potential impact on biodiversity of plans, programmes and projects for afforestation*** (or, should the case arise, deforestation); ***adjust accordingly*** in order to ensure no overall long-term negative impact on biodiversity [2006 onwards].	None	Make assessments, adjust afforestatation/ deforestation plans accordingly
ENVIRONMENT POLICY			
A2.2	**TARGET: Risks to soil biodiversity in EU substantially reduced by 2013.**		
A2.2.1	**ACTION:** ***Identify geographical risk areas for factors affecting soil biodiversity*** (soil sealing, loss of organic matter, soil erosion, etc.) [by 2009].	Provide guidance on identification of risk areas	Identify risk areas
A2.2.2	**ACTION:** ***Minimise soil sealing, sustain soil organic matter and prevent soil erosion*** through timely implementation of key measures identified in the forthcoming Thematic Strategy for Soil Protection [2010 onwards].	Propose suitable measures, provide guidance on implementation, monitor implementation, enforce any measures required by Community law.	Implement timely measures
A2.3	**TARGET: Substantial progress made towards 'good ecological status' of freshwaters by 2010 and further substantial progress made by 2013.**		
A2.3.1	**ACTION:** Ensure implementation of ***operational monitoring programmes*** [by 2006] and publication of ***River Basin Management Plans*** and establishment of ***River Basin District Programmes of Measures*** [by 2009] and that these Plans and Programmes of Measures are fully operational [by 2012], in line with provisions of the Water Framework Directive.	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Develop, adopt and implement monitoring programmes, plans and programmes of measures
A2.4	**TARGET: Principal pollutant pressures on terrestrial and freshwater biodiversity substantially reduced by 2010, and again by 2013.**		
A2.4.1	**ACTION:** Significantly ***reduce point source pollutant pressures*** on terrestrial and freshwater ecosystems through strengthening implementation of relevant Directives, notably on Integrated Pollution Prevention and Contol, Large Combustion Plants, Waste Incineration, Urban Waste Water Treatment (*cf action 3.2.1*) [2006 onwards].	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement directives at Member State level
A2.4.2	**ACTION:** Significantly ***reduce airborne eutrophicating and acidifying pollution*** of terrestrial and freshwater ecosystems in line with Thematic Strategy on Air Quality [2006 onwards]; revise National Emissions Ceiling Directive [by 2007]. (*cf action 3.2.2*)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement Thematic Strategy and NEC Directive at Member State level
A2.4.3	**ACTION:** Significantly ***reduce pollution of terrestrial and freshwater ecosystems from agricultural sources*** (notably pesticides, nitrates) through measures in line with Thematic Strategy on the Sustainable Use of Pesticides, pesticides and biocides legislation, Nitrates Directive [2006 onwards]. (*cf action 3.2.3*)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement Thematic Strategy provisions and legislation at Member State level
A2.4.4	ACTION: Significantly ***reduce current exposure, and limit future exposure, of terrestrial and freshwater ecosystems to toxic chemicals*** through measures in line with EU chemicals legislation including REACH [2006 onwards]. (cf action 3.2.4)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement REACH at Member State level.
A2.5	**TARGET: Flood risk management plans in place and designed in such a way as to prevent and minimise biodiversity loss and optimise biodiversity gains, by 2015.**		
A2.5.1	**ACTION:** As part of the preliminary flood risk assessment for each river basin, ***assess the risks and benefits of flooding for biodiversity*** [within 3 years of adoption of Directive].	Provide guidance	Carry out assessments
A2.5.2	**ACTION:** ***Ensure Flood risk management plans for each river basin optimise benefits for biodiversity*** through, in particular, allowing necessary freshwater input to wetland and floodplain habitats, and creating where possible and appropriate additional wetland and floodplain habitats which enhance capacity for flood water retention [by 2015].	Provide guidance	Ensure full consideration of biodiversity needs in preparation and implementatio of plans
OBJECTIVE 3: TO CONSERVE AND RESTORE BIODIVERSITY AND ECOSYSTEM SERVICES IN THE WIDER EU MARINE ENVIRONMENT.			
HEADLINE TARGET: In wider marine environment (outside Natura 2000 network), biodiversity loss halted by 2010 and showing substantial recovery by 2013.			
ENVIRONMENTAL POLICY			
A3.1	**TARGET 3.1: Substantial progress achieved by 2010 and again by 2013 towards 'good environmental status' of the marine environment.**		
A3.1.1	**ACTION:** Make ***initial assessments, determine 'good environmental status'*** , and ***establish environmental targets*** for each Marine Region in line within the timetable specified in the proposed Marine Strategy Directive [2006 onwards].	Council to adopt Marine Framework Directive by 2007. Commission to provide guidance, facilitate and where necessary enforce implementation.	Make assesments, determine 'good environmental status', establish environmental targets.
A3.1.2	**ACTION:** Develop ***programmes of measures*** designed to achieve good environmental status in each Marine Region [by 2016 at latest, earlier where possible].	As above	Develop programmes of measures.
A3.1.3	**ACTION:** Ensure key biodiversity and ecosystem provisions of the Thematic Strategy for the Marine Environment are assured in the forthcoming Green Paper on a Future ***Maritime Policy*** for the Union and any consequent policy.	Commission to adopt Green Paper on a future Maritime Policy for the Union (2006), launch consultation process (2006-2007), follow up as appropriate (possible White Paper, etc.)	Participate in consultation process
A3.1.4	**ACTION:** Ensure timely implementation of the ***Water Framework Directive*** as it applies to coastal areas [2006 onwards].	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Develop, adopt and implement monitoring programmes, plans and programmes of measures - as applicable for coastal areas
A3.1.5	**ACTION:** Ensure timely implementation and review of the EU ***Integrated Coastal Zone Management Recommendation*** [2006 onwards].	Coordinate implementation, review	Implement, participate in review
A3.2	**TARGET: Principal pollutant pressures on marine biodiversity substantially reduced by 2010, and again by 2013.**		
A3.2.1	**ACTION:** Significantly ***reduce point source pollutant pressures on marine ecosystems*** through strengthening implementation of relevant Directives, notably on Integrated Pollution Prevention and Contol, Large Combustion Plants, Waste Incineration, Urban Waste Water Treatment [2006 onwards] (*cf action 2.3.1*)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement directives at Member State level

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A3.2.2	**ACTION:** Significantly ***reduce airborne eutrophicating and acidifying pollution of marine ecosystems*** in line with Thematic Strategy on Air Quality [2006 onwards]; revise National Emissions Ceiling Directive [by 2007]. (*cf action 2.3.2*)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement Thematic Strategy and NEC Directive at Member State level
A3.2.3	**ACTION:** Significantly ***reduce pollution of marine ecosystems from agricultural sources*** (pesticides, nitrates) through measures in line with Thematic Strategy on the Sustainable Use of Pesticides, pesticides and biocides legislation, Nitrates Directive [2006 onwards]. (*cf action 2.3.3*)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement Thematic Strategy provisions and legislation at Member State level
A3.2.4	ACTION: Significantly reduce current exposure, and limit future exposure, of marine ecosystems to ***toxic chemicals*** through measures in line with EU chemicals legislation [2006 onwards]. (cf action 2.3.4)	Provide guidance, monitor implementation, address complaints, enforce where appropriate.	Implement REACH at Member State level.
FISHERIES POLICY			
A3.3	**TARGET: Ecosystem approach to the protection of the seas in place and implying fisheries management measures no later than 2016.**		
A3.3.1	**ACTION:** Introduce the ***fisheries management measures*** required in the Regional Marine Strategies adopted by Member States in line with the requirements of the Marine Strategy Directive [by 2017].	Ensure respect of deadlines for Programmes of Measures to be adopted by Member States and propose pertinent fishery measures	Council: adopt measures pertaining to the CFP. *Member States level*: Complete the process foreseen in Marine Strategy and draw out Programmes of Measures by region
A3.4	**TARGET: Substantially enhanced funding provided to environmentally-friendly fisheries management from 2007 onwards.**		
A3.4.1	**ACTION:** Apply new ***European Fisheries Fund and Member State funds*** for actions beneficial to marine biodiversity [2007 onwards]. (*cf Action B1.1.3*)	Negotiate Operational Plans with Member States	*Council:* adopt proposal for the European Fisheries Fund. *Member States level:* Draw out National Strategic Programmes and Operational Programmes containing enhanced expenditure in environmental action
A3.5	**TARGET: Stock levels maintained or restored to levels that can produce maximum sustainable yield, where possible no later than 2015.**		
A3.5.1	**ACTION:** Prepare ***plan of action to attain maximum sustainable yield***, prepare and implement ***stock recovery plans*** as soon as needed for any stocks outside safe biological limits, and ***management plans*** to maintain other stocks at safe biological levels. [2006 onwards]	Propose plan of action to attain maximum sustainable yield. Seek scientific advice, consult stakeholders and elaborate proposals for recovery and management plans.	*Council:* Discuss and adopt plan of action, and recovery and management plans. *Member States level:* Enforce CFP measures
A3.5.2	**ACTION:** Develop, adopt and implement ***restoration programmes for diadromous species*** (eg. trout, salmon, sturgeon). [2006 onwards]	Propose programmes.	*Council:* adopt programmes. *Member States level*: Enforce CFP measures and take initiatives outside the CFP: restoration of habitats, removal of migratory barriers, stock enhancement
A3.5.3	**ACTION:** ***Adjust fishing capacity*** to improve balance between fishing capacity and available fish stocks. [2006 onwards]	Work out efficient parameters for the assessment of fishing capacity	Enforce CFP measures and use fisheries funds to favorise capacity adjustment
A3.5.4	**ACTION:** Adopt and implement provisions under CFP for the wider establishment of ***no-take zones.***	Seek scientific advice, consult stakeholders and elaborate proposals.	*Council:* adopt proposal. *Member States level:* enforce CFP measures
A3.5.5	**ACTION:** Take concerted EU action to ***combat illegal, unreported and unregulated fishing.*** [2006 onwards]	to be completed	to be completed
A3.6	**TARGET: Impact of fisheries on non-target species and habitats progressively and substantially reduced from 2006 onwards.**		
A3.6.1	**ACTION:** Implement ***technical measures*** to help ensure favourable conservation status of marine species and habitats which are not commercially exploited, aimed at the reduction of unwanted by-catch and of damage to the benthos. [2006 onwards]	Propose new technical measures as provided for under the CFP; supervise implementation at Community level.	*Council:* adopt new technical measures as provided for under the CFP. *Member States level*: enforce CFP measures
A3.6.2	**ACTION:** Adopt ***Community Plans of Action for the conservation of sharks and seabirds*** and implement progressively thereafter.	Propose plans of action	Enforce CFP measures
A3.6.3	**ACTION:** Identify, define, adopt ***and enforce fisheries measures required for Natura 2000 sites*** in the marine environment. [by date of designation]	Define and propose measures, as appropriate, at Community level; supervise, guide and enforce implementation at Member State level.	Identify and define fishery measures, as appropriate, needed within the management plans pf N2000 sites
A3.6.4	**ACTION:** Ensure adequate treatment of biodiversity concerns in all cases where ***environmental impact assessment or strategic environmental assessment*** is required in relation to fisheries or aquaculture, and ensure authorisation process and subsequent implementation take due account of EIA and SEA findings in order to prevent negative impacts on biodiversity or, where prevention is not possible, minimise, mitigate and/or compensate for these negative impacts [2006 onwards].	Address any complaints relating to incorrect application of EIA; enforce correct application where necessary.	Apply EIA where required, take due account of findings in authorisation procedure, ensure necessary mitigation and compensation measures.
A3.7	**TARGET: Substantially improved information and reporting on environmental integration of the Common Fisheries Policy from 2008 onwards.**		
A3.7.1	**ACTION:** Make ***periodic assessments*** [2006 onwards] of the progress of the Common Fisheries Policy in incorporating environmental protection requirements (with particular reference to biodiversity).	Seek basic scientific information and report to Council and Parliament	Collect the data necessary to give scientific support to the indicators used in the reports
OBJECTIVE 4: TO REINFORCE COMPATABILITY OF REGIONAL AND TERRITORAL DEVELOPMENT WITH BIODIVERSITY IN THE EU.			
HEADLINE TARGET: Regional and territorial development benefiting biodiversity, and negative impacts on biodiversity prevented and minimised or, where unavoidable, adequately compensated for, from 2006 onwards.			
REGIONAL POLICY, SPATIAL PLANNING			
A4.1	**TARGET: Cohesion and structural funds contributing to sustainable development and making (directly or indirectly) a positive contribution to biodiversity, and negative impacts on biodiversity prevented or minimised or, where unavoidable, adequately compensated for, from 2006 onwards.**		
A4.1.1	**ACTION:** Allocate, at MS initiative, ***cohesion and structural funds for projects directly or indirectly benefiting biodiversity*** in appropriate operational programmes [2006 onwards]. (*cf Action B1.1.4*)	Encourage MS to provide for such projects, provide technical support for programming (consistent with Financing Natura 2000 proposal); evaluate national programmes submitted	Propose and implement projects
A4.1.2	**ACTION:** ***ESF contributing to biodiversity objectives*** through awareness-raising, capacity building, employment of the young, long-term jobless and elderly, etc. [2007 onwards] (*cf Action B1.1.5*)	Encourage MS to provide for such projects, provide technical support for programming; evaluate national programmes submitted	Propose and implement projects

A4.1.3	**ACTION:** Ensure ***National Strategic Reference Frameworks (NRSFs) and Operational Programmes 2007-2013 fully respect environmental acquis*** [2006 onwards]	Check conformity of NSRFs and Operational Programmes with environmental acquis	Ensure conformity of NSRFs and Operational Programmes with environmental acquis
A4.1.4	**ACTION:** Ensure ***strategic environmental assessment (SEA) of Operational Programmes*** [2006 onwards] gives adequate treatment to biodiversity concerns and that the final programmes take full account of the SEA findings in order to prevent, minimise and mitigate impacts on biodiversity and provide where possible benefits to biodiversity. (*cf Action A1.1.4*)	Check SEA Directive is applied.	Apply SEA Directive
A4.1.5	**ACTION:** Ensure ***environmental impact assessment (EIA) of projects co-financed by Cohesion Fund and European Regional Development Fund (ERDF)*** , where such EIA is required, gives adequate treatment to biodiversity concerns and that final projects take full account of EIA findings in order to prevent, minimise and mitigate impacts on biodiversity and provide where possible benefits to biodiversity [2006 onwards], (cf Action A1.1.4)	Assess all proposals over Euro 50m (25m for environmental projects) for potential biodiversity impacts. Address any complaints relating to projects. Check EIA Directive is correctly applied.	Ensure project applications submitted to Commission are complete
A4.1.6	**ACTION:** Ensure full ***participation of civil society*** in development of NSRF and national Operational Programmes and in SEA/EIA and ensure biodiversity interests fully represented [2006 onwards].	Address complaints relating to inadequate participation	Ensure such participation
A4.2	**TARGET: Negative impacts of territorial plans (within each MS) on biodiversity prevented or minimised, and positive benefits optimised, from 2006 onwards.**		
A4.2.1	**ACTION:** Ensure that all ***those territorial plans subject to strategic environmental assessment (SEA)*** (where deemed applicable by Member States under the SEA Directive) do not cause significant negative impacts on biodiversity (direct, indirect, cumulative) [2006 onwards].	Assess effectiveness of SEA in addressing biodiversity impacts (2006 SEA reports, commission special study to take stock)	Apply SEA ensuring adequate treatment of biodiversity concerns at all stages of assessment
A4.2.2	**ACTION:** Implement policies and measures in line with Thematic Strategy for Urban Environment to ***prevent urban sprawl*** [2006 onwards].	n/a	Full responsibility for action
A4.3	**TARGET: Ecological coherence and functioning strengthened through spatial planning from 2006 onwards.**		
A4.3.1	**ACTION:** Develop and implement ***spatial and programmatic plans*** that support the coherence of the Natura 2000 network (in line with the requirements of the nature directives to ensure such coherence) and maintain and/or restore the ecological quality of wider landscape [2006 onwards] (*cf Action B2.5.1*)	Promote best practice at MS, regional and local levels?	Develop and implement such plans
A4.4	**TARGET: Significant increase in proportion of tourism which is ecologically sustainable by 2010 and again by 2013.**		
A4.4.1	CBD ***Guidelines on Sustainable Tourism*** promoted, adopted and implemented as appropriate by key stakeholders [2006 onwards].	promote best practice	Implement best practice
A4.5	**TARGET: All above outcomes achieved also in Outermost Regions.**		
A4.5.1	**ACTION:** All above actions applied, as appropriate, in Outermost Regions (French Guyana, Guadeloupe, Reunion, Matinique, Canaries, Azores, Madeira) [2006 onwards].	As for all above actions under targets 4.1-4.5, as appropriate	(***FRANCE, SPAIN, PORTUGAL ONLY***) All above actions (where applicable) applied in outermost regions
ENVIRONMENTAL POLICY			
A4.6	**TARGET: All Strategic Environmental Assessments and Environmental Impact Assessments have taken full account of biodiversity concerns (2006 onwards).**		
A4.6.1	**ACTION:** Ensure effective treatment of biodiversity in all ***Strategic Environmental Assessment (SEA) of programmes and plans, where such SEA is required,*** including by promotion of best practice through the development of guidelines, recognition of good performance) - and ensure that full account is taken of the findings of the assessment (in terms of impacts on biodiversity) in the final programmes or plans [2006 onwards]. (*cf Action A1.1.4*)	See action 1.1.3 above	See action 1.1.3 above
A4.6.2	**ACTION:** Ensure effective treatment of biodiversity in all ***Environmental Impact Assessment (EIA) of projects, where such EIA is required,*** including by promotion of best practice through the development of guidelines, recognition of good performance) - and ensure that full account is taken of the findings of the assessment (in terms of impacts on biodiversity) in the authorisation procedure [2006 onwards]. (*cf Action A1.1.4*)	See action 1.1.3 above	See action 1.1.3 above
A4.6.3	**ACTION:** Ensure all new ***Trans-European Networks*** provide for environmental assessment and take full account of biodiversity impacts in the design and authorisation process in the framework of the existing EU legislation [2006 onwards]. (*cf Action A1.1.4*)	Check projects (existing modus operandi ENV/TREN)	Ensure project applications submitted to Commission are complete
A4.6.4	**ACTION:** ***Take stock of effectiveness of EIA and SEA*** in preventing and minimising negative impacts and improving positive impacts of developments on biodiversity and consider necessary measures to improve EIA and SEA performance in this respect [by 2009]. (*cf Action A1.1.4*)	See 1.1.3 above.	See 1.1.3 above.

OBJECTIVE 5: TO SUBSTANTIALLY REDUCE THE IMPACT ON EU BIODIVERSITY OF INVASIVE ALIEN SPECIES (IAS) & ALIEN GENOTYPES.

HEADLINE TARGET: Negative impacts on EU biodiversity of IAS and alien genotypes prevented or minimised from 2010 onwards.

A5.1	**TARGET: Impact of IAS on biodiversity in the EU substantially reduced by 2010 and again by 2013.**		
A5.1.1	**ACTION:** ***Assess, at EU level, gaps in the current legal, policy and economic framework*** to prevent, control and eradicate IAS and mitigate their impacts on biodiversity and ***develop a community strategy to address IAS including, where necessary and appropriate, measures to fill gaps*** [by 2007].	Make assessment, propose measures to fill gaps	Participate in assessment, adopt any necessary measures to fill gaps in Council
A5.1.2	**ACTION:** Encourage Member States to develop ***national strategies on invasive alien species*** [by 2007] and to implement them fully [by 2010].	Encourage MS	Develop national strategy

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A5.1.3	**ACTION:** Encourage ratification and implementation by Member States of the International Convention for the ***Control and Management of Ship's Ballast Water and Sediments*** under the International Maritime Organisation [2006 onwards].	Encourage ratification	Ratify and implement
A5.1.4	**ACTION:** ***Establish early warning system*** for the prompt exchange of information between neighbouring countries on the emergence of IAS and cooperation on control measures across national boundaries [by 2008].	Propose early warning system, coordinate implementation at Community level	Adopt system in Council, implement system at national level
A5.2	**TARGET: Impact of alien genotypes on biodiversity in the EU significantly reduced by 2010 and again by 2013.**		
A5.2.1	**ACTION:** ***Fully apply the Cartagena Protocol on Biosafety*** to ensure an adequate level of protection of biodiversity (and human health) in the field of the safe handling, use and transfer of genetically modified organisms [2006 onwards].	Apply as appropriate at Community level	Apply as appropriate at MS level
A5.2.2	**ACTION:** Ensure protection of biodiversity as part of measures to protect human health and environment in relation to the ***deliberate release into the environment of Genetically Modified Organisms (GMOs)*** [2006 onwards].	Ensure in GMO authorisation procedure	Ensure at national level in line with requirements of the authorisation

POLICY AREA 2: THE EU AND GLOBAL BIODIVERSITY

OBJECTIVE 6: TO SUBSTANTIALLY STRENGTHEN EFFECTIVENESS OF INTERNATIONAL GOVERNANCE FOR BIODIVERSITY AND ECOSYSTEM SERVICES.

A6.1	**TARGET: International governance for biodiversity substantially more effective in delivering positive biodiversity outcomes by 2010.**		
A6.1.1	**ACTION:** Press for ***effective worldwide implementation of the Convention on Biological Diversity,*** decisions of the Conference of the Parties including thematic and cross-cutting programmes of work, and other related international and regional biodiversity agreements (eg. Bonn, Berne, AEWA, Ramsar, UN Fish Stocks Agreement) and promote greater synergies between these [2006 onwards].	Work at EU, global and regional levels for enhanced effectiveness in CBD implementation by streamlining operations of CBD, coordinating action between related multilateral environmental agreements, working towards integrated outcome-based reporting, establishing global partnership with key stakeholders	As for Community level
A6.1.2	**ACTION:** Enhance ***integration of biodiversity into global processes*** with important impacts on biodiversity such as sustainable development and the Millenium Development Goals, trade and climate change [2006 onwards].	Work for effective integration of biodiversity concerns within Commission for Sustainable Development, in Doha Round of trade negotiations, and under the UNFCCC/Kyoto Protocol regime	As for Community level
A6.1.3	**ACTION:** Promote ***improved oceans governance*** for conservation and recovery of marine biodiversity, ecosystem services and integration of key sectors, including in relation to areas beyond national jurisdiction; make progress towards mechanisms for establishment of Marine Protected Areas in the high seas, including by supporting the adoption of an Implementing Agreement to the UN Convention of the Law of the Sea, with the scientific support from the CBD, notably in developing criteria for identifying the areas to be protected. [2006 onwards]	Coordinate EU action	Support coordinated EU action

OBJECTIVE 7: TO SUBSTANTIALLY STRENGTHEN SUPPORT FOR BIODIVERSITY AND ECOSYSTEM SERVICES IN EU EXTERNAL ASSISTANCE.

A7.1	**TARGET: Financial resources flowing annually to projects directly benefiting biodiversity has substantially increased in real terms (for period 2006-2010 compared with period 2000-2005; and again for period 2011-2013).**		
A7.1.1	ACTION: ***Ensure adequate community funds earmarked for biodiversity*** in development cooperation (in line with European Consensus on Development Cooperation) in EC Thematic Programme for Environment and Natural Resources and ensure the use of these funds is targeted at biodiversity priorities [2007-2013]; decide [in 2006] on an adequately funded EC Thematic Programme for Environment and Natural Resources (ENRTP) in the European Neighbourhood and Partnership Instrument (ENPI) and the Development Cooperation and Economic Cooperation Instrument (DCECI) and ensure that biodiversity priorities receive an appropriate share of the total ENRTP and DCECI resources [2007-2013].	Include an adequate multiannual indicative resource framework and robust progamming priorities for biodiversity in the ENRTP Article of both the DCECI and ENPI which should be adopted as early as possible in 2006. Further elaborate the biodiversity priorities in the Thematic Strategy Paper for the ENRTP and ensure its adoption well before the end of 2006. Seek coverage for biodiversity actions in financing strategy papers and indicative programmes under ENPI instrument.	n/a
A7.1.2	**ACTION:** Allocate adequate resources in ***Country and Regional Strategy Programmes*** wherever biodiversity identified as a key issue in country/regional environmental profiles [2006 onwards].	Check and ensure that resources are available to implement the recommendations in the R/CEP through biodiversity projects or mainstreaming biodiversity concerns in to other relevant projects.	n/a
A7.1.3	**ACTION:** ***Enhance MS funds earmarked for biodiversity*** (in line with European Consensus on Development Cooperation) in MS bilateral development cooperation programmes in support of implementation of the CBD, Millenium Development Goals and other programmes relevant for biodiversity in developing countries [2006 onwards].	n/a	Check and ensure that resources are available to implement the recommendations in the R/CEP through biodiversity projects or mainstreaming biodiversity concerns in to other relevant projects.
A7.1.4	**ACTION:** ***Enhance the overall contribution of EU MS for biodiversity through a substantial 4th replenishment of the GEF*** based on the agreed policy priorities [2006/07].	Use EU high level meetings to press for a substantial replenishment based on fair burden-sharing.	Continue to press in GEF replenishment negotiations and through bilateral contacts for a substantial replenishment based on the agreed policy priorities.
A7.1.5	**ACTION:** Enhance funds for biodiversity related actions under the ***national and regional components of the Instrument for Pre-Accession (IPA) and the European Neighbourhood and Partnership Instrument (ENPI)***	Seek coverage for biodiversity actions in financing strategy papers and indicative programmes under the European Neighbourhood and Partnership Instrument (ENPI) and Instrument for Pre-Accession (IPA).	n/a
A7.1.6	**ACTION:** Enhance economic and development assistance funds available for biodiversity-related actions in the MS' ***Overseas Countries and Territories*** [2006 onwards] .	Check and ensure that biodiversity is addressed through specific programmes and projects or through intergration in other sectors covered by economic development assistance	Check and ensure that biodiversity is addressed through specific programmes and projects or through intergration in other sectors covered by economic development assistance

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A7.2	**TARGET: EU 'mainstream' external development assistance delivering enhanced biodiversity and related livelihoods benefits, and negative impacts on biodiversity prevented or minimised, from 2006 onwards.**		
A7.2.1	**ACTION:** ***Prepare country and regional environmental profiles*** with specific attention to the maintenance of biodiversity and ecosystem services (in particular in relation to livelihood concerns), and take these needs fully into account in preparation of Country Strategy Papers (CSPs) and Regional Strategy Papers (RSPs) and in equivalent MS country and regional aid programming [2006 onwards].	Check and ensure that appropriate action in response to the recommendations in the Regional and Country Environmental Profiles is undertaken as specific biodiversity projects or mainstreamed in to other relevant projects.	n/a
A7.2.2	**ACTION:** Systematically carry out ***ex-ante strategic environmental assessment (SEA) of relevant strategies and programmes and environmental impact assessment (EIA) of relevant projects*** funded by EU in partner countries and ensure actions are identified and implemented to prevent and mitigate negative impacts on biodiversity in a timely manner [2006 onwards].	Check and ensure that SEAs and EIAs are systematically carried out on relevant development strategies, programmes and projects	Check and ensure that SEAs and EIAs are systematically carried out on relevant development strategies, programmes and projects
A7.2.3	**ACTION:** Substantially ***strengthen capacities in recipient countries and in Commission and MS cooperation programming*** for these purposes, including integrating implementation of the CBD into national development strategies including Poverty Reduction Strategies [2006 onwards].		
A7.2.4	**ACTION:** Ensure that ***projects financed by EU under the Development Cooperation and Economic Cooperation Instrument (DCECI), European Development Fund (EDF), pre-accession, neighbourhood and partnership instruments*** delivering enhanced biodiversity benefits, and negative impacts on biodiversity prevented or minimised [2006 onwards].	Commission to ensure that safeguards are included in procedures to ensure that these considerations are taken into account before funding can be released.	n/a
A7.2.5	**ACTION:** Ensure that projects financed by EU economic and development assistance do not cause significant negative impacts on biodiversity in the ***MS Overseas Countries and Territories*** [2006 onwards].	Check and ensure that SEAs and/or EIAs are systematically carried out on development stratgeies, programmes and projects	Check and ensure that SEAs and/or EIAs are systematically carried out on development stratgeies, programmes and projects
OBJECTIVE 8: TO SUBSTANTIALLY REDUCE THE IMPACT OF INTERNATIONAL TRADE ON GLOBAL BIODIVERSITY AND ECOSYSTEM SERVICES.			
8.1	**TARGET 8.1: Impact on biodiversity of EU trade significantly reduced by 2010 and again by 2013.**		
A8.1.1	**ACTION:** ***Identify major impacts of trade on third countries' and EU biodiversity and adopt measures to significantly reduce (in case of negative impacts) and/or enhance (in case of positive impacts) these impacts*** [by 2010]. This will in particular be done in the context of the Commission's trade-related Sustainability Impact Assessment (SIA) Programme, that covers a number of sectoral studies (e,g, agriculture, forests and forest products as well as fisheries), in the context of multilateral (WTO, ongoing negotiations on the Doha Development Agenda) and/or regional/bilateral free trade agreements (e.g. EPAs with ACP countries).	Identify impacts and follow-up measures - in particular in the context of the Commission's trade-related Sustainability Impact Assessment (SIA) Programme, covering a number of sectoral studies (e.g., agriculture, forests and forest products, fisheries, tourism), in connection to multilateral (WTO, ongoing negotiations on the Doha Development Agenda) and/or regional/bilateral free trade agreements (e.g. the planned Economic Partnership Agreements between the EU and ACP countries and the EU-Mediterranean Free Trade Area).	Under the Commission's SIA Programme, individual Member States may play a role in identifying and implementing follow-up measures.
A8.1.2	**ACTION:** Foster links between the WTO agreements and biodiversity-related international agreements, and ensure biodiversity taken into account as a Non-Trade Concern, in order to identify and ***put in place key measures to reduce the ecological impact of globalisation*** in line with the precautionary principle and with the commitment made in the context of the WTO's Doha Development Agenda to promote the objective of sustainable development (paragraph 6 of the Doha Declaration) and to enhance the mutual supportiveness of trade and environment (paragraph 31) [2006 onwards].	This will be done in line with the commitment made in the context of the WTO's Doha Development Agenda to promote the objective of sustainable development (paragraphs 6 and 51 of the Doha Declaration) and to enhance the mutual supportiveness of trade and environment (notably paragraphs 28 and 31).	As for Community level
A8.1.3	**ACTION:** Promote ***full implementation of the CBD Bonn Guidelines*** on Access to Genetic Resources and Fair and Equitable Sharing of Benefits (ABS) arising out of their Utilisation, and other agreements relating to ABS such as the FAO International Treaty on Plant Genetic Resources for Food and Agriculture – and continue to contribute to negotiation of an international regime on ABS according to the mandate adopted at the 7th Conference of the Parties of the CBD [2006 onwards].	Further implement actions set out in the Commission Communication on implementation of the Bonn Guidelines in the EC. Support effective EU coordination and defending of EU positions in ongoing negotiations on an international ABS regime.	Ensure effective implementation of the Bonn guidelines at national level, in particular by enhanding awareness of stakeholders. Effectively participate in and contribute to EU preparations for international ABS negotiations. Effectively contribute to ongoing negotiations of the Standard Material Transfer Agreement under the International Treaty on Plant Genetic Resources for Food and Agriculture.
A8.1.4	**ACTION:** Maximise the proportion of EU ***consumption of wood products*** deriving from sustainable sources [by 2010].	Ensure implementation of CITES provisions for listed timber species and support capacity building in range states. Review of other timber species with criteria for listing. Analyse options for further legislation to control imports of illegally harvested timber into the EU (as foreseen in FLEGT action plan). Facilutate exchange of best practice in private and public sector procurement policies faouring wood producst from sustainable sources.	Ensure implementation of CITES provisions for listed timber species and support capacity building in range states. Review of other timber species with criteria for listing. Participate in Community-level analysis of options for further legislation to control imports of illegally harvested timber into the EU (as foreseen in FLEGT action plan). Encourage private and public sector procurement policies favouring wood products from sustainable sources.
A8.1.5	**ACTION:** In the context of action 8.1.1, identify EU ***non-wood imports driving deforestation*** in third countries (particularly in the context of trade related SIAs, notably on agricultural products) and adopt and implement measures to prevent, minimise and/or mitigate this deforestation [by 2010].	Identify impacts and follow-up measures, in particular in the context of the Commission's trade-related Sustainability Impact Assessment (SIA) Programme, that covers a number of relevant sectoral studies (e.g., agriculture, forests and forest products, fisheries, tourism), both in connection to multilateral (WTO, ongoing negotiations on the Doha Development Agenda) and to regional/bilateral free trade agreements (e.g. the planned Economic Partnership Agreements between the EU and ACP countries and the EU-Mediterranean Free Trade Area).	Under the Commission's SIA Programme, individual Member States may play a role in identifying and implementing follow-up measures.
A8.1.6	**ACTION:** Put in place bilateral agreements between EU and major timber exporting countries with aim to support ***forest law enforcement, governance and trade (FLEGT)*** [2006 onwards].	Identify and secure key bilateral agreements	Support voluntary FLEGT Partnerships through development cooperation and technical assistance as well as through implementation of the FLEGT Regulation.

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
A8.1.7	**ACTION:** Ensure ***Fisheries Partnership Agreements*** compatible with maintenance and recovery of stocks at levels that can produce maximum sustainable yield, and with minimising impact on non-target species and habitats [2006 onwards].	Negotiate agreements; support assessments and recommendations for sustainable fisheries through Joint Scientific Committees, implementation by Parties through Joint Committees	Ensure fishing fleets fish in line with agreements
A8.1.8	**ACTION:** Support capacity-building and implementation of CITES provisions to ensure that ***trade in CITES species is effectively regulated and controlled*** and not detrimental to the conservation of the species in range states [2006 onwards].	Support CITES programmes to implement CoP decisions on capacity building, national legislation, enforcement and species specific measures in range states. Continue to ensure coordinated response to unsustainable trade in CITES species through the EU Scientific Review Group, including consultation with range states and ensure constructive follow-up to possible import suspensions with range states. Review MS enforcement of EC CITES Regulations, including gaps and best practice in addressing illegal trade, following completion of on-going study in this field. Assess the effectiveness of EC CITES Regulation in ensuring that trade in endangered species is sustainable.	Ensure that EC CITES Regulations are adequatly implemented and enforced including the imposition of adequate sanctions for infringements of the Regulations. Support of CITES programmes and programmes in range states to ensure effective implementation of CITES to trade in species on sustainable levels.
A8.1.9	**ACTION:** Apply principle of ***prior informed consent*** when commercially using traditional knowledge relating to biodiversity and encourage the ***equitable sharing of benefits*** arising from the use of such knowledge [2006 onwards].	n/a	Implementation of relevant aspects of the Bonn Guidelines in MS when granting access to traditional knowledge relating to biodiversity.

POLICY AREA 3: BIODIVERSITY AND CLIMATE CHANGE

OBJECTIVE 9: TO SUPPORT BIODIVERSITY ADAPTATION TO CLIMATE CHANGE.

HEADLINE TARGET: Potential for damaging impacts, related to climate change, on EU biodiversity substantially reduced by 2013.

A9.1	**TARGET: 8% reduction in greenhouse gas emissions achieved by 2010.**		
A9.1.1	**ACTION:** ***Commitments made under the Kyoto Protocol respected*** [2006 onwards].	Implement measures identified in European Climate Change Programme (ICCP) including European Emission Trading Scheme (ETS); review ECCP and ETS	Comply with Kyoto burded-sharing target as laid down in Kyoto Protocol ratifying decision (2002/358/EC)
A9.2	**TARGET: Global annual mean surface temperature increase limited to not more than 2ºC above pre-industrial levels.**		
A9.2.1	**ACTION**: ***Further ambitious measures to limit temperature increase agreed*** in line with the long-term Intergovernmental Panel on Climate Change (IPCC) assessments, and action ***against climate change post-2012 extended to all the polluting countries*** (with common but differentiated responsibilities) and sectors involved.	Explore strategies for achieving necessary emission reductions and reduction pathways for the group of developed countries in the order of 15-30% by 2020, compared to the baseline envisaged in the Kyoto Protocol, and beyond, without prejudging new approaches for differentiation between Parties; follow-up on Montreal UNFCCC COP 11 and negotiate international response addressing climate change. Actions at Community and Member State level to be differentiated in due course.	See text on Community level actions.
A9.3	**TARGET: Climate change adaptation or mitigation measure from 2006 onwards delivering biodiversity benefits, and any negative impacts on biodiversity prevented or minimised, from 2006 onwards.**		
A9.3.1	**ACTION:** All ***climate change adaptation and mitigation measures assessed*** to prevent negative impacts or, where prevention not possible, to minimise, mitigate and/or compensate for negative impacts and, wherever possible, provide positive benefits to biodiversity [2006 onwards].	Impact assessment of new policies at Community level where appropriate	Impact assessment of new policies at MS level where appropriate, application of strategic environmentala ssessment and environmental imapct assessment where required to plans, programmes and projects.
A9.3.2	**ACTION:** Ensure that implementation of EU ***Biomass Action Plan*** takes due account in assessments, where relevant, of impacts on biodiversity, in particularly on high-nature-value farmland and forests, in order to achieve ecological sustainability of biomass production [2006 onwards].	Provide guidance on sustainability impact assessments	Carry out sustainability impact assessments, ensure decision-making takes account of findings in relation to biodiversity impacts in order to prevent and minimise negative impacts
A9.4	**TARGET: Resilience of EU biodiversity to climate change substantially strengthened by 2010.**		
A9.4.1	**ACTION:** Develop a ***comprehensive programme of priority actions to support biodiversity adaptation to climate change in the EU*** [by 2008].	Coordinate development of programme	Participate in development of programme
A9.4.2	**ACTION:** Assess [by 2008], on the basis of available scientific evidence, and substantially strengthen [by 2010] ***coherence, connectivity and resilience of the protected areas network*** (Natura 2000 and non-Natura protected areas) in order to ***maintain favourable conservation status of species and habitats in the face of climate change*** by applying, as appropriate, tools which may include flyways, buffer zones, corridors and stepping stones (including as appropriate to neighbouring and third countries), as well as actions in support of biodiversity in the wider environment (cf *action 1.2.3*).	Coordinate assessment, develop guidelines to strengthen coherence	Participate in assessment, apply measures to strengthen coherence and connectivity
A9.4.3	**ACTION:** Make a preliminary ***assessment of habitats and species in the EU most at risk*** from climate change [by 2007], detailed assessment and ***appropriate adaptation measures*** prepared [by 2009], commence implementation [by 2010].	Launch debate, raise awareness of need for Community level approach to adaptation	Contribute to assessment through regional and site specific climate impact assessment

POLICY AREA 4: THE KNOWLEDGE BASE

OBJECTIVE 10: TO SUBSTANTIALLY STRENGTHEN THE KNOWLEDGE BASE FOR CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY, IN THE EU AND GLOBALLY.

A10.1	**TARGET: Research findings on biodiversity and ecosystem services has substantially advanced our ability to ensure conservation and sustainable use by 2010 and again by 2013.**		
A10.1.1	**ACTION**: Subject to funding being found from existing financial resources, establish an ***EU mechanism for independent, authoritative research-based advice*** to inform implementation and further policy development.	Develop concept in consultation with key stakeholders, confirm funding availability, put mechanism in place.	Engage in mechanism

A10.1.2	**ACTION:** Identify ways and means to ***strengthen independent scientific advice to global policy making*** , *inter alia* by actively contributing to CBD consideration of the 2007 evaluation of the Millenium Ecosystem Assessment, and the ongoing consultations on the need for improved International Mechanisms on Scientific Expertise on Biodiversity.	Engage in CBD consideration of 2007 MA evaluation, and ongoing IMOSeB consultations	As for Community
A10.1.3	**ACTION:** Enhance research on ***status, trends and distribution*** of all habitats and species of community interest and of additional habitats and species of policy relevance [2006 onwards].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities (including research infrastructures)	Accommodate in national research programmes and take forward initiative(s) under the European Strategy for Research Infrastructures (ESFRI)
A10.1.4	**ACTION:** Enhance research on most ***significant pressures*** on biodiversity, develop and test ***prevention and mitigation options*** [2006 onwards].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities	Accommodate in national research programmes
A10.1.5	**ACTION:** Develop and apply tools to measure, anticipate and improve ***effectiveness of most important policy instruments*** for conservation and sustainable use of biodiversity [2006 onwards].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities	Accommodate in national research programmes
A10.1.6	**ACTION:** Allocate adequate ***financial resources*** to European and national biodiversity research and to dissemination of its results, including under the Seventh Framework Programme [2006 onwards].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities (including research infrastructures)	Accommodate in national research programmes and take forward initiative(s) under the European Strategy for Research Infrastructures (ESFRI)
A10.1.7	**ACTION:** Establish effective and inclusive ***European Research Area*** for biodiversity and strengthen capacities (including infrastructures) in key disciplines, interdisciplinary and participatory science [2006 onwards].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities (including research infrastructures)	Accommodate in national research programmes and take forward initiative(s) under the European Strategy for Research Infrastructures (ESFRI)
A10.1.8	**ACTION:** Put institutional arrangements in place to ensure ***policy-relevant research*** done (eg. in support of implementation of the nature directives, integration of biodiversity into sectoral policies) and ***research outcomes are reflected where appropriate in policy development*** [2006 onwards].	Strengthen Community-level institutions/mechanisms at the science-policy interface (*see Action A10.1.1*); accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities; strengthen ability to assimilate research results at policy level.	Accommodate in national research programmes; strengthen national institutions/mechanisms at the science-policy interface for biodiversity; strengthen ability to assimilate research results at policy level.
A10.1.9	**ACTION:** Establish and promote [2006 onwards] ***common data standards and quality assurance procedures to enable interoperability*** of key european and national biodiversity databases and inventories [by 2008].	Accommodate in FP7 workprogrammes - notably under the Specific Programmes for Cooperation and for Capacities (including research infrastructures)	Accommodate in national research programmes and take forward initiative(s) under the European Strategy for Research Infrastructures (ESFRI)

B. THE FOUR SUPPORTING MEASURES

SUPPORTING MEASURE 1: ENSURING ADEQUATE FINANCING FOR BIODIVERSITY.

B1.1	**TARGET: Adequate funding provided for Natura 2000, biodiversity outside Natura 2000 in EU, biodiversity in external assistance and biodiversity research, inventory and monitoring 2007-2013.**		
B1.1.1	**ACTION:** Ensure ***adequate financing provided*** [2007-2013] ***to Natura 2000*** implementation through community (CAP Rural Development, Structural Funds, Life+) and MS co-financing, accessible to those who manage Natura 2000 sites, with focus on optimising long-term conservation status and benefits as well as priority awareness raising and networking initiatives. (*cf Action A1.1.2*)	See Action A1.1.2	See Action A1.1.2
B1.1.2	ACTION: Allocate, at MS initiative, within ***each national/regional Rural Development (RD) Programme*** , adequate ***Community and MS co-financing*** to measures available under all three axes of the RD Regulation which are directly or indirectly supportive of nature and biodiversity [2006/07 and any subsequent revisions].	See Action A2.1.1	See Action A2.1.1
B1.1.3	**ACTION**: Apply new ***European Fisheries Fund and Member State funds*** for actions beneficial to marine biodiversity [2007-2013]. (*cf Action A3.4.1*)	See Action A3.4.1	See Action A3.4.1
B1.1.4	**ACTION**: Allocate, at MS initiative, ***cohesion and structural funds*** for projects directly or indirectly providing biodiversity benefits in all MS operational programmes [2006 onwards]. (*cf Action A4.1.1*)	See Action A4.1.1	See Action A4.1.1
B1.1.5	**ACTION**: ***ESF contributing to biodiversity objectives*** through awareness-raising, capacity building, employment of the young, long-term jobless and elderly, etc. [2007 onwards]. (cf *Action A4.1.2*)	See Action A4.1.2	See Action A4.1.2
B1.1.6	**ACTION:** Ensure adequate ***financing of other biodiversity measures outside Natura 2000 in the EU through other Community co-financing*** (eg. Life+) and Member States' financing [2007-2013].	Ensure adequate co-financing within limits of funds available	Ensure adequate Member States financing to make up shortfall in funds available at Community level
B1.1.7	**ACTION:** Increase in real terms international development assistance funds ***flowing annually to projects directly benefiting biodiversity*** [for period 2006-2010 compared with period 2000-2005; and again for period 2011-2013]. (*cf Actions A7.1.1 to A7.1.6*)	See Actions A7.1.1 to A7.1.6	See Actions A7.1.1 to A7.1.6
B1.1.8	**ACTION:** Allocate adequate financial resources to ***European and national biodiversity research*** and to dissemination of its results, including under the Seventh Framework Programme [2006 onwards]. (*cf Action A10.1.5*)	See Action A10.1.5	See Action A10.1.5
B1.1.9	**ACTION:** Allocate adequate funds for ***supporting measures*** including promoting joined-up planning, development of partnerships, monitoring, awareness raising and institutional capacity-building for biodiversity [2007-2013].	Allocate funds through available instruments including Life+	Allocate funds through available instruments at Member State, regional and local levels

SUPPORTING MEASURE 2: STRENGTHENING EU DECISION-MAKING FOR BIODIVERSITY.

B2.1	**TARGET: EU vision on biodiversity and ecosystem services agreed and providing policy framework by 2010.**		
B2.1.1	**ACTION**: Launch, hold and conclude ***EU debate*** on this vision and policy framework [2007/08].	Establish process, coordinate debate, agree vision	Participate, agree vision

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
B2.1.2	**ACTION:** Strengthen understanding and communication of the ***values of natural capital and of ecosystem services*** , and the taking into account of these values in the policy framework, expand incentives for people to safeguard biodiversity [2006 onwards].	Studies, meetings, research to feed into EU debate (Action 2.1.1) - development of proposals as appropriate	Participate in Community level action. Equivalent actions at national level.
B2.2	**TARGET: New policies benefit biodiversity and ecosystem services, and their negative impact on biodiversity and ecosystem services prevented or minimised, from 2006 onwards.**		
B2.2.1	**ACTION:** Integrate concerns for biodiversity and ecosystem services, given their economic important in terms of jobs and growth for some sectors such as tourism, into ***Lisbon National Reform Programmes*** and the development of policies and budgets under these NRPs [2006 onwards].	Address biodiversity and ecosystem services in future guidelines, evaluate adequacy of integration of biodiversity and ecosystem services concerns in NRPs, address these issues in annual reports and any future recommendations to MS.	Integrate in NRPs, address in annual NRP reporting
B2.2.2	**ACTION:** ***Screen all new legislative and policy proposals at EU and MS levels for potential significant impacts on biodiversity*** in general and on ecosystem goods and services in particular, and ensure effective treatment of biodiversity concerns in policy impact assessments, in particular to ensure the maintenance of ecosystem goods and services [2006 onwards].	Implement policy impact assessment effectively as part of Better Regulation, including taking biodiversity impacts better into account.	Implement policy impact assessment in accordance with national requirements
B2.3	**TARGET: Biodiversity needs have been better integrated, as necessary, into post-2013 Financial Perspectives and any mid-term review of FP 2007-2013.**		
B2.3.1	**ACTION:** Strengthen ***alignment of the biodiversity policy cycle with the broader EU policy and budgeting cycle*** to enable more effective integration [2006 onwards].	Carry out mid-term and final reviews in timely manner in order to feed in to broader policy reviews (eg. CAP) and into next Financial Perspectives post 2013.	Participate in policy review
B2.4	**TARGET: Complimentarity of EC and MS biodiversity strategies and action plans substantially enhanced by 2010.**		
B2.4.1	**ACTION:** ***Re-align MS biodiversity strategies and action plans with this EU Action Plan*** [by 2007] and strengthen mechanisms for ongoing alignment of EC and MS biodiversity strategies and action plans [2007 onwards].	Encourage MS to re-align; propose and establish new mechanisms	Re-align
B2.4.2	**ACTION:** ***Strengthen the institutional arrangements in support of coherence and complimentarity*** in the implementation of EC and MS biodiversity strategies and action plans and in particular of this Action Plan [2006 onwards].	Propose and establish effective mechanism	Agree to and participate in new mechanism
B2.4.3	**ACTION:** ***Strengthen mechanisms for delivery from MS level to local level*** [2006 onwards].	None	Full responsibility for the action
B2.5	**TARGET: Effective integration of Natura 2000, rural development, river basin management and other territorial plans and programmes in support of biodiversity achieved by 2010.**		
B2.5.1	**ACTION:** Strengthen proactive ***integration of available planning instruments*** including Natura 2000, river basin management planning, programmes of measures for soils, rural development plans - towards application of a ecosystems approach in the terrestrial and freshwater environment [2006 onwards]. (*cf Action A4.3.1*)	Provide guidance	Develop approaches and methods to integrate planning at Member State, regional and local levels.
B2.5.2	**ACTION:** Integrate biodiversity concerns into the ***evaluation, monitoring and reporting mechanisms of Community-funded programmes*** which have an impact on the conservation and recovery of biodiversity [2006 onwards].	Provide guidance, integrate into community level evaluation and reporting	Integrate into MS level evaluation, monitoring and reporting
B 2.6	**TARGET: Substantial improvement in compliance with environmental regulations by 2010 and again by 2013**		
B2.6.1	**ACTION:** Reinforce efforts to ensure ***compliance, control and enforcement*** at national, regional and local levels [2006 onwards].	Monitor compliance at Community level, enforce where necessary	Monitor compliance at Member State level, control and enforce where necessary
SUPPORTING MEASURE 3: BUILDING PARTNERSHIPS FOR BIODIVERSITY.			
B3.1	**TARGET: Key stakeholder groups actively engaged in conservation of biodiversity from 2006 in each MS.**		
B3.1.1	**ACTION:** Enhance ***communication, cooperation and concerted action*** between Commission, Member States, landowners, scientific and conservation communities in support of Natura 2000 (including implementation of 'El Teide' Declaration) [2006 onwards].	Provide guidance, facilitate, co-finance	Provide guidance, facilitate, finance
B3.1.2	**ACTION:** Develop ***farming and biodiversity*** , ***forestry and biodiversity*** partnerships, building on existing consultative processes under the Common Agricultural Policy and forest policy [2006 onwards].	Facilitate such partnerships at Community level	Facilitate such partnerships at MS, regional and local levels as appropriate
B3.1.3	**ACTION:** Establish and adequately fund ***Regional Advisory Councils*** for fisheries, as provided for under the Common Fisheries Policy, and support their operations [2006 onwards].	Support RACs at Community level as provided for in Common Fisheries Policy	Support RACs at MS level as provided for in Common Fisheries Policy
B3.1.4	**ACTION**: Establish a ***Biodiversity and Climate Change Adaptation Task Force*** at EU level [2007] to advise on measures to support biodiversity adaptation to climate change and the prevention of damaging impacts of climate change adaptation and mitigation measures on biodiversity [2007 onwards].	Establish task force	Participate in task force
B3.1.5	**ACTION:** Develop ***biodiversity and planning*** partnership [2007 onwards].	Encourage such partnerships at MS levels, facilitate exchange of best practice	Facilitate partnerships at MS, regional and local levels as appropriate
B3.1.6	**ACTION:** Develop ***business and biodiversity*** partnership [2006 onwards].	Facilitate such partnerships at Community level	Facilitate such partnerships within MS
B3.1.7	**ACTION:** Develop partnership between ***financing sector and biodiversity*** [2006 onwards].	Facilitate such partnerships at Community level, including involving EBRD and EIB	Facilitate such partnerships within MS
B3.1.8	**ACTION:** Apply the CBD Akwe-Kwon Guidelines for ***projects affecting terrestrial lands of indigenous and local communities*** both within the EU MS and in Third countries [2006 onwards].	Apply in respect of projects financed by Community public aid	Apply in respect of projects financed by MS public aid
SUPPORTING MEASURE 4: BUILDING PUBLIC EDUCATION, AWARENESS AND PARTICIPATION FOR BIODIVERSITY.			
B4.1	**TARGET: 10 million Europeans actively engaged in biodiversity conservation by 2010, 15 million by 2013.**		
B4.1.1	**ACTION**: Develop [2006/07] and implement [2007 onwards] a ***communications campaign*** in support of full implementation of this Action Plan.	Coordinate development and implementation of campaign in partnership with MS	Develop and implement campaign in partnership with Commission

No.	OBJECTIVES, TARGETS, ACTIONS	COMMUNITY LEVEL ACTION	MEMBER STATES ACTION
B4.1.2	**ACTION:** Strengthen and implement IUCN ***Countdown 2010*** initiative [2006 onwards].	Support the initiative, implemenht joint actions under the initiative	Support the initiative, implemenht joint actions under the initiative
B4.1.3	**ACTION:** Ensure ***public participation, related access to justice requirements of the Aarhus Convention*** applied to projects, plans and programmes relating to or having an impact on biodiversity conservation [2006 onwards].	Ensure provisions of community law transposed and applied, address complaints	Apply provisions of Community law

C. MONITORING, EVALUATION AND REVIEW

ANNUAL REPORTING

C1.1	TARGET: Annual, Mid-term and Final Reports submitted in timely fashion to Council and Parliament		
C1.1.1	**ACTION:** ***Submit annual report*** on progress in implementation to Council and Parliament [starting end 2007].	Prepare and submit reports	Contribute information on MS-level implementation to reports.

INDICATORS

C1.2	TARGET: Indicators in place and informing policy decisions by 2010		
C1.2.1	**ACTION:** Adopt and apply [by 2007], at EC and MS levels, a small set of ***biodiversity headline indicators*** (*see Annex 2*) which inform the public and decision-makers on the state and trends of biodiversity, pressures on biodiversity and the effectiveness of key policy measures; adopt and apply at EC level a biodiversity index as a ***Sustainable Development Indicator*** and as a ***Structural Indicator*** [by 2007]	Development, quality assessment, make proposal, implement indicators.	Engage with Commission in indicator development, adopt in Council, support data flow.

MONITORING

C1.3	TARGET: Monitoring providing adequate data flow for implementation of indicator set, for reporting on favourable conservation status, and for broader assessment of effectiveness of this Action Plan by 2010.		
C1.3.1	**ACTION:** Establish ***reference values for favourable conservation status*** for Habitats and Birds Directive habitats and species to achieve a consensus of definitions across Member States [2006/07]; monitor habitats and species status in relation to these values [2007 onwards].	Coordinate development of reference values	Participate in development of reference values, carry out related monitoring as required under nature Directives
C1.3.2	**ACTION:** Use, and as necessary develop, ***monitoring tools, approaches and frameworks*** (building on those existing, including those of civil society) in order to establish and coordinate adequate harmonised data flows for the biodiversity indicators to reveal key trends [2007 onwards].	Coordinate implementation of the action with EEA	Participate in development of tools, approaches and frameworks
C1.3.3	**ACTION:** Develop ***shared information system*** for biodiversity monitoring and reporting in the EU, based on agreed biodiversity indicators, which makes data available to all interested users, streamlines reporting and supports policy evaluation and development at national, regional and global levels [2006 onwards].	Coordinate development of shared information system, including exploitation of generic information and communication technologies	Participate in development of shared information system

EVALUATION AND REVIEW

C1.4	TARGET: Action Plan adjusted as necessary in 2010, new plan adopted in 2013		
C1.4.1	**ACTION:** Submit to Council and Parliament in 2009 ***a concise mid-term evaluation of progress towards the 2010 targets*** (to end 2008) and make any essential adjustments in actions to meet targets.	Commission to coordinate evaluation, prepare and submit evaluation report; Council to respond to evaluation report	Make evaluation at national level and contribute to EU-level evaluation
C1.4.2	**ACTION:** Submit to Council and Parliament, in 2011, a ***full evaluation of extent to which EU has met its 2010 targets.***	Commission to coordinate evaluation, prepare and submit evaluation report; Council to respond to evaluation report.	Make evaluation at national level and contribute to EU-level evaluation
C1.4.3	**ACTION**: Submit to Council and Parliament, in 2014, a ***full evaluation of extent to which EU has met all post-2010 targets*** of this Action Plan, and proposing ***a new Action Plan for the period of the new Financial Perspectives post-2013*** .	Commission to coordinate evaluation and preparation of new action plan, prepare and submit evaluation report and action plan; Council to respond to evaluation report and new action plan.	Make evaluation at national level and contribute to EU-level evaluation and preparation of new action plan.

Key

POLICY AREA

OBJECTIVE/SUPPORTING MEASURE

HEADLINE TARGET

A1.1	TARGET
A1.1.1	**ACTION** with related dates and/or deadlines, eg. [by 2010]

NB: The dates and/or deadlines attached to actions and targets in this Action Plan do not in any way override any deadlines for measures required under existing Community policy or legislation. Similarly, the indication in this Action Plan that an action is to be taken '2006 onwards' does not necessarily imply that this action should not already have been implemented or already be in process of implementation, in accordance with existing Community policy or legislation.