COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 16.12.2008
SEC(2008) 3044

COMMISSION STAFF WORKING DOCUMENT

Accompanying document to the

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

A MID-TERM ASSESSMENT OF IMPLEMENTING THE EC BIODIVERSITY ACTION PLAN

CONSOLIDATED PROFILE

{COM(2008) 864 final}
{SEC(2008) 3042}
{SEC(2008) 3043}
{SEC(2008) 3045}

TABLE OF CONTENTS

INTRODUCTION

This consolidated profile presents a comparative factual assessment of progress at both Community and Member States levels in the implementation of the EC Biodiversity Action Plan. It is intended to complement the information given in the Communication, providing a more detailed analysis, and presenting key comparative data underpinning the assessment.

It is based on information collected for the country profiles as well as the Community level assessment and is organised according to the four main policy areas, ten objectives and four supporting measures set out in the Biodiversity Action Plan.

Contextual information, drawn from the 2006 Biodiversity Communication, is presented at the outset for each objective and supporting measure. This is then followed by a progress assessment. As it has not been possible to assess progress by Member States at the level of individual actions, a comparison between the Community level implementation and that at the level of Member States has been made at the level of targets set out in the Biodiversity Action Plan.

More detailed information for the targets can be found in the country profiles as well as in the table summarising progress at Community level.

The emphasis has been on using official sources of information. In addition to the responses to a questionnaire sent to Member States the Commission has availed of different databases and information systems, such as the Natura 2000 database and assessments of Community funded programmes (e.g. LIFE, Rural and Regional Development programmes).

Information compiled within the framework of the European Environment Agency led project on Streamlining of European Biodiversity Indicators (SEBI 2010) has also been used where this is directly linked to individual targets of the Biodiversity Action Plan. However, there is a separate report providing a summary for each of 26 indicators under the SEBI 2010 project.

It should be noted that some data, including those relating to allocations of funds to nature and biodiversity under different Community programmes are preliminary and will require further evaluation.

POLICY AREA 1: Biodiversity in 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]

A. Context

Action to safeguard the EU's most important habitats and species is critical to halting biodiversity loss by 2010 as well as to fostering its recovery. The basis for EU action in this regard is mainly provided by the Birds[1] and the Habitats[2] Directives (the 'nature directives'). Special attention needs to be afforded to the creation and protection of Natura 2000, a network of sites of highest nature value. This network needs to be actively completed on land and extended to the marine environment and requires greater commitment from Member States to propose, designate, protect and effectively manage Natura 2000 sites. There is also a need to strengthen coherence, connectivity and resilience of the network, including through support to national, regional and local protected areas. The use of species action plans for the recovery of the EU's most threatened species needs to be extended. Comparable measures for habitats and species are required in those EU outermost regions not covered by the nature directives[3].

B. Progress assessment

Target 1.1 Natura 2000 network established, safeguarded, designated and under effective conservation management by 2010, 2012 in marine

Establishment of Natura 2000

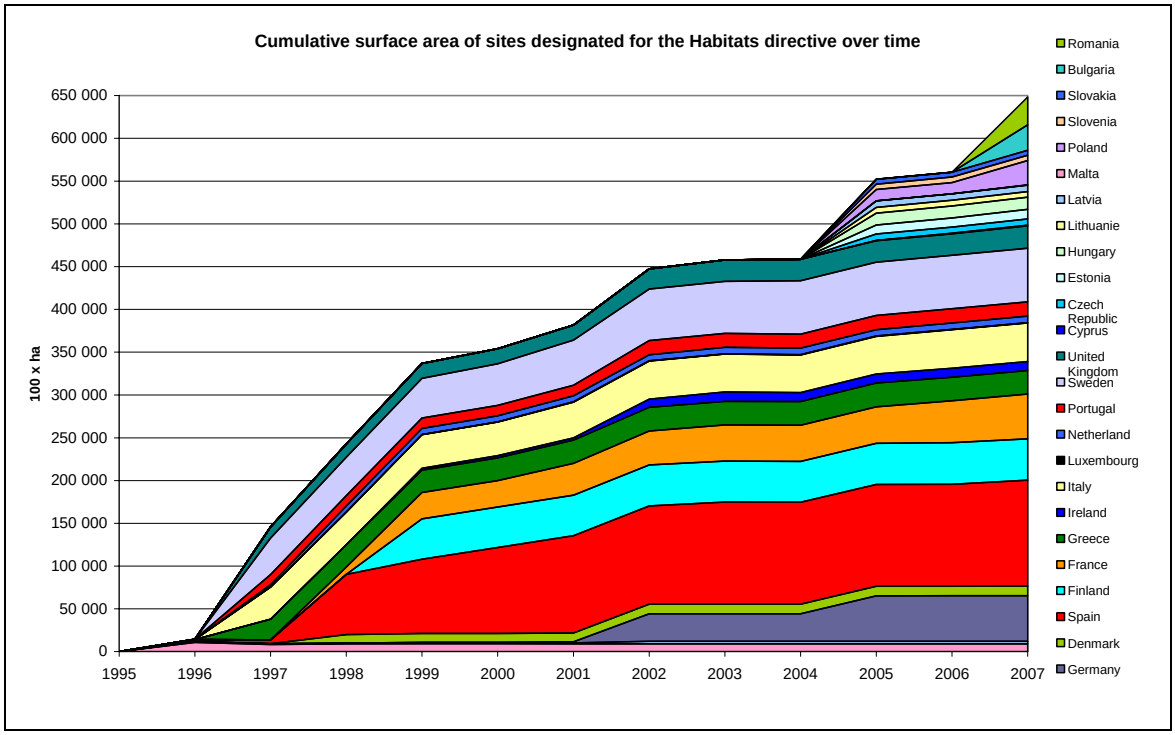
There has been significant progress in the establishment of Natura 2000. Since adoption of the 2006 Biodiversity Communication in May 2006 a total of 823 additional areas have proposed for protection under the Habitats Directive, with a combined surface area of approximately 97 000 km². Commission Decisions of 13 November 2007, 25 January 2008 and 28 March 2008, which also include many earlier proposals of the Member States, have added 4 744 Sites of Community Importance covering a total surface area of approximately 109 000 km². This updated and extended the lists of protected sites for the Atlantic, Continental, Boreal, Macaronesian and Mediterranean biogeographical regions and provided a first list for the Pannonian region, thus extending the network for the first time to new Member States (EU-10). By the end of 2008 there will be a second updating round of the lists of Sites of Community Importance (SCIs).

---

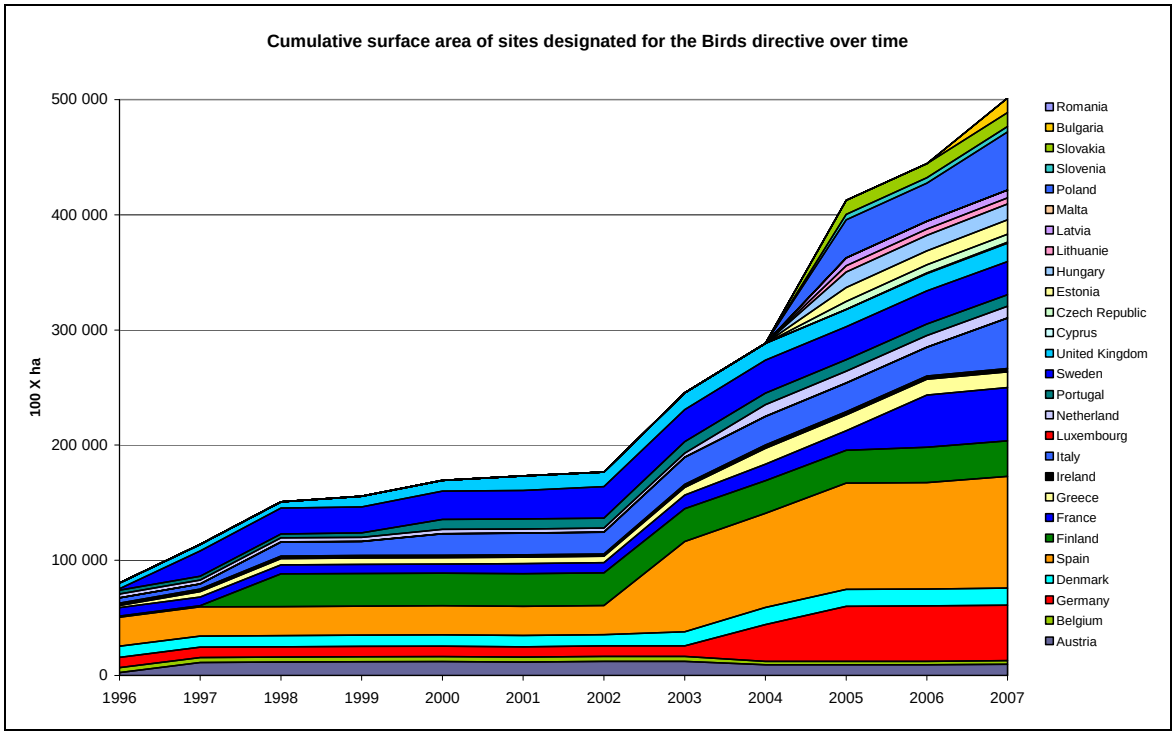
1 Directive 79/409/EC, OJ L 103, 25.4.1979, p.1.
2 Directive 92/43/EEC, OJ L 206, 22.7.1992, p.7.
3 i.e. measures taken voluntarily and at national initiative for French Guiana, Reunion, Guadeloupe, Martinique.

By June 2008 there were 21 612 Sites of Community Importance and Special Areas of Conservation (SACs) under the Habitats Directive covering 655 968 km². There were 5 004 Special Protection Areas (SPAs) under the Birds Directive covering 517 896 km². The overall Natura 2000 network now comprises more than 25 000 sites, covering around 17 % of the total area of the European Union[4]. These increases are mainly due to Natura 2000 sites being proposed and designated in the 10 new countries that joined the EU in 2004 as well as in Bulgaria and Romania since their accession in 2007. However, it also includes significant additional proposals and designations by EU15 Member States, particularly under the Birds Directive (See Figure 1). A NATURA barometer is updated twice yearly by the European Topic Centre for Biodiversity of the European Environment Agency, providing summary statistics for Natura 2000 sites for each Member State based on officially supplied data.

Figure 1: Cumulative surface area of sites (A) proposed for the Habitats Directive and (B) designated under the Birds Directive over time (Source is European Topic Centre for Biodiversity).



4 The figure is based on spatial data and is subject to change over time.



The situation regarding the marine establishment of Natura 2000 is less advanced than for terrestrial areas. This is especially the case for the offshore marine environment. To facilitate progress the Commission published in 2007 a guide on establishing Natura 2000 in the marine environment to assist Member States in the selection of marine Natura 2000 sites by 2008[5]. There have been meetings of a marine expert group to assess the state of play with marine Natura 2000 designations and to specify the assessment process and the implementation of fisheries measures. All coastal Member States are now working to identify further suitable marine Natura 2000 sites. This includes internal consultations, research and studies, some of which are supported by LIFE projects. Progress is slow and only a few Member States (e.g. SW, UK) proposed additional offshore sites in 2008. At least 6 Member States have indicated that they will propose sites in early 2009. The Commission has prepared non-binding guidance on introducting measures for marine Natura 2000 sites under the Common Fisheries Policy (CFP), complementing the earlier marine Natura 2000 guidelines. A seminar for site selection for Atlantic Biogeographical sea region is scheduled for March 2009. Seminars for other regions will follow later. Completeness of Natura 2000 network.

The Commission has continued to assess the completeness of the Natura 2000 network for different Member States as well as of their legal transposition of the Birds and Habitats Directives. On the basis of checking the national measures transposing the Birds and Habitats Directive in EU-25, the Commission has initiated non-conformity cases where gaps have been detected[6]. The Commission has also continued to pursue cases of bad application of the nature

5 http://ec.europa.eu/environment/nature/natura2000/marine/index_en.htm

6 As regards the Birds Directive, infringement procedures related to non-conformity issues are ongoing against 16 Members States (AT, IE, ES, DK, UK, EL, IT, LU, CZ, EE, HU, LT, LV, PL, SK, BG). As regards the Habitats Directive infringement procedures related to non-conformity issues are ongoing against 17 Member States (AT, DE, UK, FR, IE, ES, DK, NL, EL, LU, CZ, EE, MT, PL, SI, SK, BG).

directives in 2007[7]. A summary of existing important case law on the nature directives provided by the EU Court of Justice has been published[8].

As of June 2008, 8 Member States had designated more than 15 % of their terrestrial territory as SCIs: Slovenia (31.4 %); Bulgaria (29.6 %); Spain (23.4 %); Portugal (17.4 %); Estonia (16.8 %); Greece (16.4 %); Luxembourg (15.4 %); and Hungary (15.0 %). As regards SPAs, 4 Member States had designated more than 15 % of their terrestrial territory: Slovakia (25.1 %); Slovenia (23 %); Bulgaria (20.4%) and Spain (19.1 %).

At EU level, around 12.2 % of the terrestrial territory is now protected under the Habitats Directive. As regards determining the completeness of the Natura 2000 network there are ongoing technical evaluations to assess whether each habitat type and species of the Habitats Directive occurring in a Member State is sufficient represented within the network. By June 2008, 21 of the EU-27 Member States were considered to have reached a sufficient representation of site coverage for more than 80 % of the terrestrial species and habitats of Community interest under the Habitats Directive within their territory. The new Member States are generally doing well (See Figure 2).

Areas designated under the Birds Directive now cover around 10 % of the terrestrial territory. There is no agreed methodology in place to determine the completeness of the SPA network for different Member States. In the absence of this, and where Member States have not prepared comprehensive national reviews of areas qualifying for SPA designation the Commission continues to use the listings of Important Bird Areas in Europe, prepared by BirdLife International, to assess progress in designating SPAs. This approach has been consistently endorsed by the EU Court of Justice in the relevant case law on designation under the Birds Directive.

---

7 There were important rulings of the EU Court of Justice against Greece, Ireland and Spain for their failures to comply with the Birds Directive, especially in relation to completing the designation of Special Protection Areas. A first assessment of SPA designation for EU-10+2 completed and legal action taken when necessary; infringement cases against 19 Member States (FIN, ES, IE, EL, PT, DE, AT, UK, PL, SL, SK, MT, LT, LV, HU, CY, CZ, RO, BG) on the basis that the list of areas classified as SPAs is not sufficient. Infringement cases open against 4 Member States (IE, AT, UK, PL) on the basis that the list of pSCIs transmitted is not exhaustive.

8 Nature and Biodiversity Cases - Ruling of the European Court of Justice.

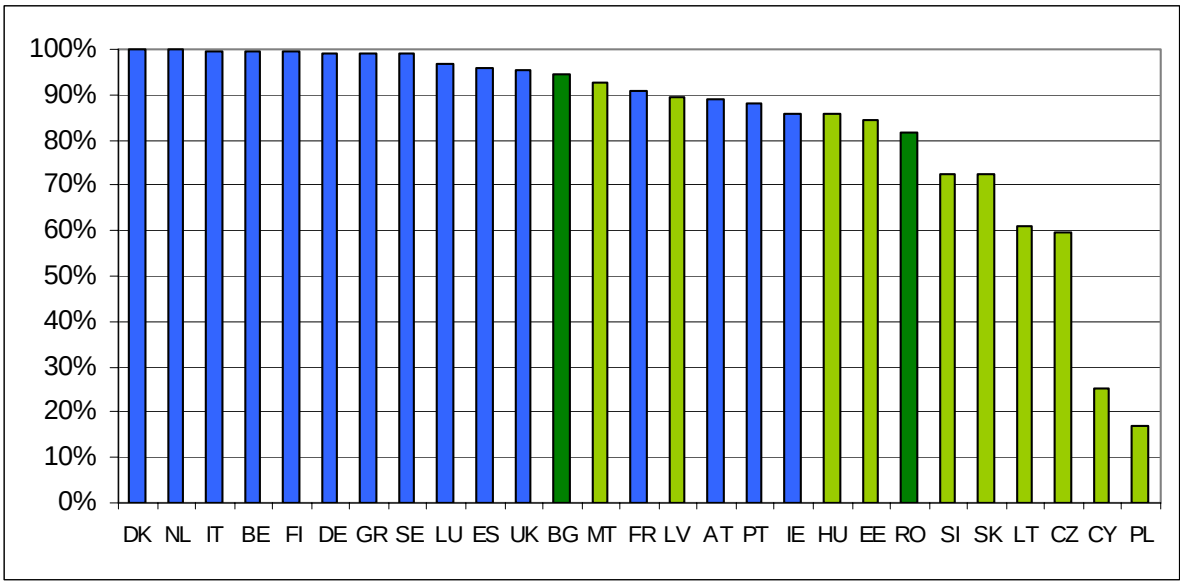


Figure 2: Level of sufficiency of representation of different habitat types and species in Member States' proposed site networks under the Habitats Directive (Source is European Topic Centre for Biodiversity).

Management and protection of Natura 2000 sites

As the selection, proposal and designation of Natura 2000 sites is now at an advanced stage attention needs to increasingly focus on the protection and management of the network. Although not explicitly mentioned as an obligation under the Habitats Directive[9] management plans are recognised by most Member States as a valuable tool to assist with the positive management of Natura 2000 sites. Thirteen out of the 27 EU member states have indicated that they have completed/agreed management plans and 5 indicated that they do not have completed management plans for Nature 2000 sites. Information on completed/agreed management plans was not available for 9 EU member states. Based on available information, at least 5 312 Natura 2000 areas have completed or agreed management plans (Figure 3).

[9] Article 6(1) of the Habitats Directive requires Member States to establish the necessary conservation measures for special areas of conservation involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans.

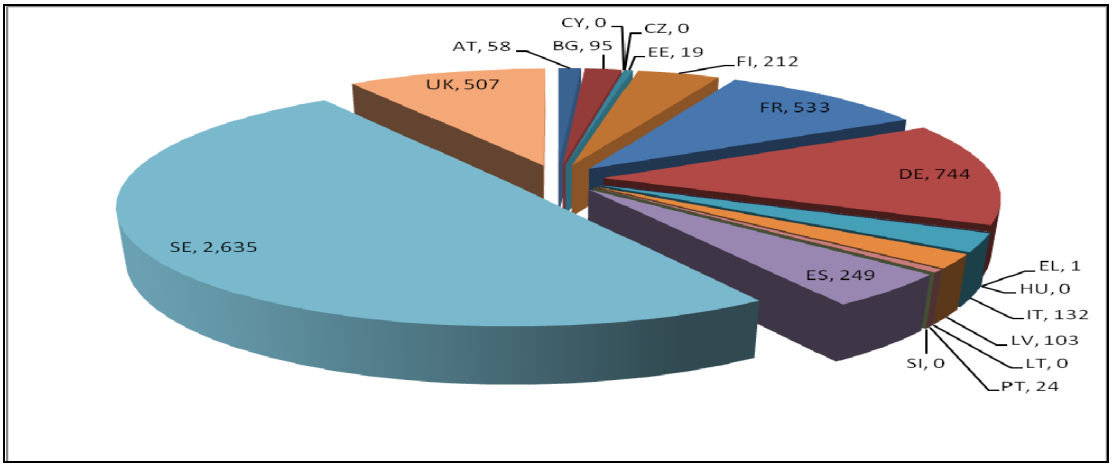


Figure 3: Number of Natura 2000 sites in different Member States with a completed management plan (Source: response to Member State questionnaire).

Furthermore, a total of 3 250 Natura 2000 sites in the EU have management plans under development (Figure 4). Seventeen EU member states have indicated that they are preparing management plans for Natura 2000 sites. Three have indicated that they do not have plans under development. No information was available on this for 7 countries.

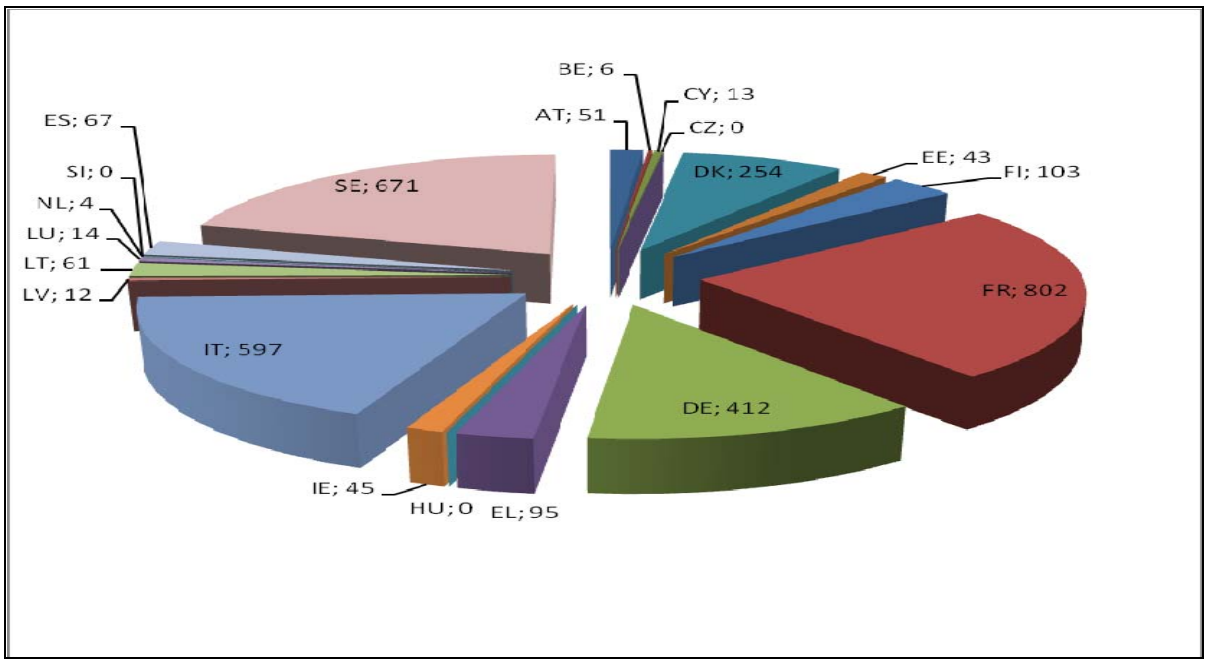


Figure 4: Number of Natura 2000 sites in different Member States with a management plan in preparation (Source: response to Member State questionnaire).

In order to assist the protection and positive management of Natura 2000 sites and in recognition of potential conflicts with certain socio-economic sectors the Commission is developing guidance documents for Natura 2000 in estuaries and coastal zones, for non-energy extractive industries and for wind energy and nature conservation. Ad hoc working groups have been created to assist the Commission in this process. These include experts of Member States, industry and non governmental organisations. Such guidance is additional to the published Commission guidelines on managing Natura 2000 under Article 6, which have

also been complemented by guidance on compensatory measures to offset loss or damage to Natura 2000 sites[10].

Also with regard to pro-active measures a new EU network of practitioners called 'GreenForce', dealing with nature conservation and forestry policies and laws in the Member States, has been set up to facilitate communication and the sharing of experience on practical implementation, compliance and enforcement[11]. Its June 2008 meeting focused on 'A Transparent and Participative Way of Putting Natura 2000 Management Plans into Practice'.

The Commission has also launched a contract to overview the approach towards SAC designation, establishment of conservation objectives and management instruments being applied by different Member States. A new contract for Natura 2000 to overview economic and social benefits, dealing with conflicts, best practice at the Local/Site levels, and its relationship with other initiatives which serve to protect biodiversity is foreseen for the end of 2008.

LIFE Financing for Natura 2000

LIFE continues to be a strategically important fund to support the development of demonstration and best practice projects for management and restoration of Natura 2000 sites throughout the Member States. Between 2000 and 2006 EUR 436 532 507was spent over 434 projects (Figure 5). Furthermore, the period from 2000 onwards has a more stable budget (see SEBI indicator No. 25) (although there was no call in 2001) though applications were not equally successful, so not all allocations were used. The allocation of LIFE+ for nature and biodiversity related projects for 2007 (EUR 187 000 000) shows an increase in EU expenditure, though a decision on project proposals is not finalised. It should be noted that the amounts indicated represent the EU contribution to the projects, not the total cost of the projects in question as LIFE covers 50% to 75% of the total costs, depending on the target species and/or habitats and biodiversity aims of the project in question. Based on experiences in different Member States a wide range of best practice publications, relevant to the management of Natura 2000 sites have now been produced[12].

10 http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm
11 http://ec.europa.eu/environment/greenforce/index_en.htm
12 http://ec.europa.eu/environment/life/index.htm

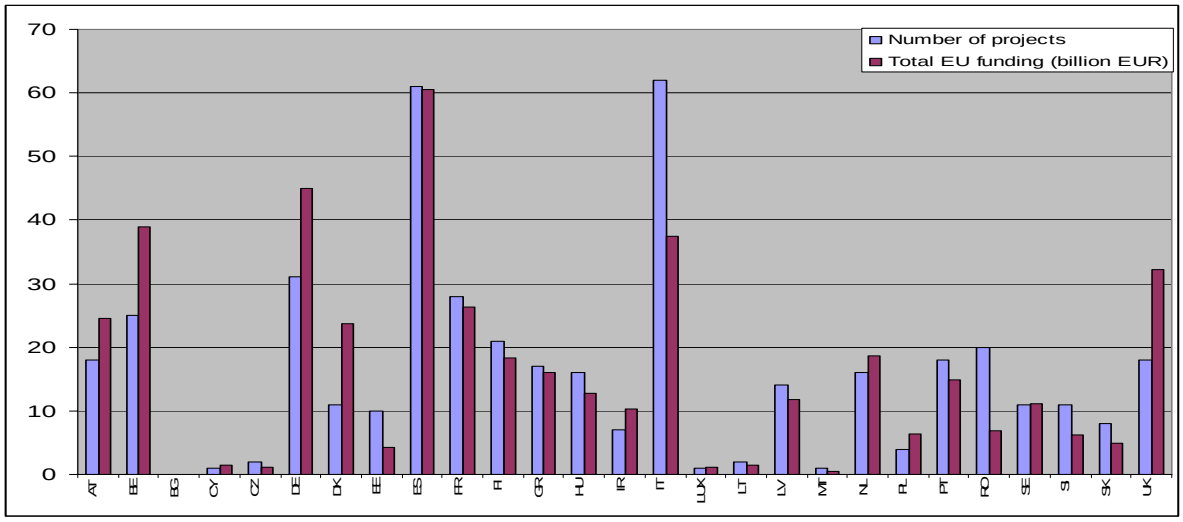


Figure 5: Comparison of EU funding per Member State and number of projects funded by LIFE 2000-2006.

Comprehensive opportunities to co-fund Natura 2000 costs have been provided in each appropriate EC funding regulation for 2007-2013. Guidelines & training have been provided under an EC contract provided to assist Member States in applying these funds. An Information Technology Tool on financing Natura 2000 has been developed to assist potential beneficiaries on how individual measures for Natura 2000 might be funded by the different major EU sources. Concerns have been expressed about poor uptake of funding opportunities in different Member States. The Commission is currently checking relevant funding programmes submitted by Member States (See also A 2.1.1, A 3.4.1, A 4.1.1 and B.1.1.1). A new Commission study contract aims to further support linkages between financing and management of Natura 2000. This will update and refine cost estimates of Natura 2000 financial needs, provide documented examples of good practice where EU funds have been used in a successful and innovative way and develop a methodology to identify and evaluate different socio-economic benefits.

Target 1.2 Sufficiency, coherence, connectivity and resilience of the protected areas network in the EU substantially enhanced by 2010 [and further enhanced by 2013]

Natura 2000 sites do not exist in isolation from the surrounding landscape. Corridors and connectivity, as recognised under Article 10 of the Habitats Directive are important especially in the light of the pressures that will be associated with climate change. First guidelines on how to manage landscape features of major importance for wild flora and fauna have been prepared with a view to identifying ways of supporting the ecological coherence of the Natura network[13].

[13] http://ec.europa.eu/environment/nature/ecosystems/index_en.htm

Target 1.3 Good conservation status of species achieved (Article 17, Red Data Book, Atlases, Common bird monitoring, ex-situ conservation)

Conservation status assessment and red data lists

The first major 'health check' of the conservation status of species and habitats of Community interest under Article 17 of the Habitats Directive is underway. On the basis of national reports received in 2007/early 2008 the Commission, with support of the European Topic Centre on Biological Diversity of the European Environment Agency will complete an EU level assessment by mid-2009. An overview of the national assessments is already available[14]. A national summary of the Article 17 reports has also been prepared for each Member State[15].

A first examination of the data reveals that the majority of the species of European interest are in an unfavourable status. There is considerable variation in the results of the status assessment between Member States. Latvia has the highest percentage (49 %) of species under favourable conservation conditions (green), with Spain the lowest percentage (12 %). Slovenia has 50 % species currently inadequately conserved (amber) the highest of any Member State with Sweden and Cyprus reporting on 8 % of species currently inadequately conserved. The highest percentage of species in unfavourable conditions (red) is reported by Sweden at 42 % with Estonia reporting only 1 % of species currently in unfavourable conditions. However, there are still significant gaps in knowledge, resulting in unknown assessments. This reflects a lack of knowledge for many species, for example in the structure and function of their required habitats. This is especially the case for marine species. Trend information was not supplied for most assessments, so it is not possible to determine if their status is getting better or worse.

[14] http://biodiversity.eionet.europa.eu/article17

[15] can be viewed on the CIRCA-Reporting at http://circa.europa.eu/Public/irc/env/monnat/library

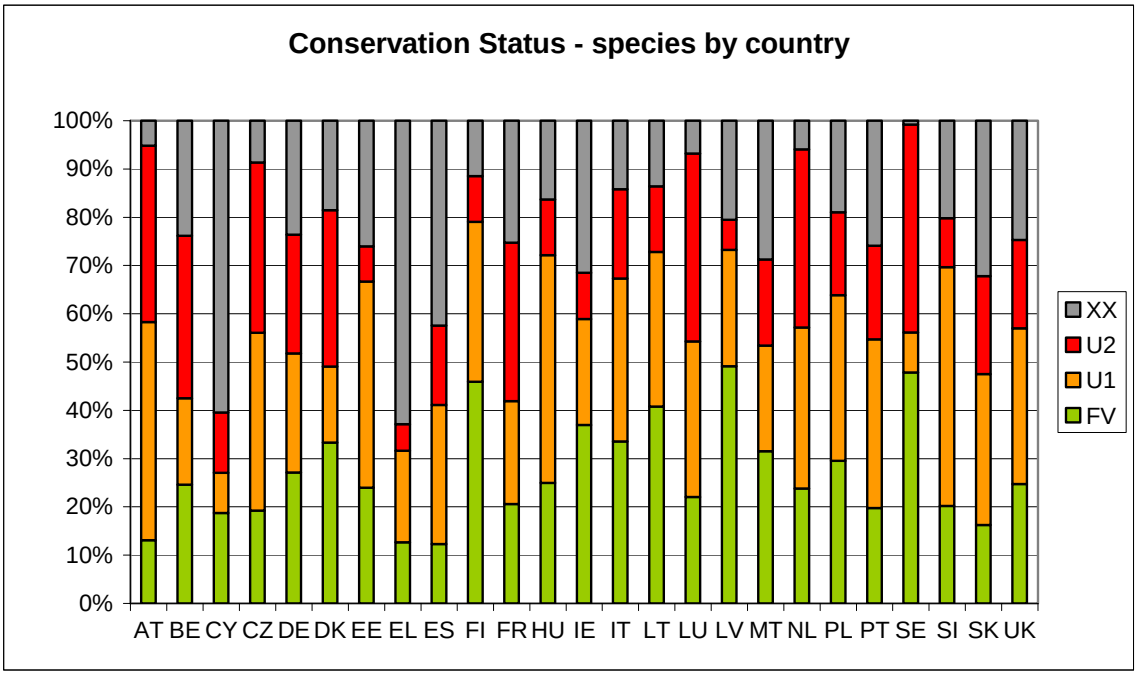


Figure 6: Preliminary conservation status assessment per country for species of Community interest. FV = favourable; U1 = unfavourable inadequate; U2 = unfavourable bad; XX = unknown status (Source European Topic Centre for Biodiversity).

Likewise, there is significant variation in the conservation status of habitats of European interest in different Member States. The greatest percentage of habitats determined to be in a favourable condition (green) is in Italy (60 %), with the lowest at 1 % by Spain. The percentage of habitat that is conserved in an inadequate condition (amber) ranges from 55 % in the Netherlands to 10 % in Denmark. Belgium and the Czech Republic have the highest percentage of habitats in unfavourable conditions (red) at 79 % of habitat types.

In each biogeographic region (terrestrial part), between 40 and 60 % of heaths, scrubs and rocky habitats are in favourable status. Bogs, freshwater habitats, grasslands and dunes are mainly in unfavourable status and between 20 and 30 % of species are in unfavourable bad status. As for species there are still significant gaps in knowledge, resulting in unknown assessments and as trend information was not supplied for most assessments, it is not possible to determine if their status is getting better or worse.

While not encouraging these preliminary results, based on assessment for the period up to 2006, are not surprising. The decline and destruction of species and habitats, which has been ongoing for many decades and cannot be reverted within a few years. A range of animal species, once at the brink of extinction like for example the Otter *Lutra lutra*, the Beaver *Castor fiber* or the European bison *Bison bonasus* are doing very well again and have – due to their protection and active conservation measures – increasing populations. For others, the decline has been stopped, implementation of management/restoration measures are about to start and will hopefully show first signs of recovery in the next assessment of 2013/2015.

The next step of the current assessment is to carry out the EU-level (biogeographic level) assessment of conservation status. Draft results are envisaged to be finalised in late 2008 following the input of the public consultation on the draft results. This exercise will help identify the extent to which additional measures for the management and restoration of

species populations and habitats are needed and will be key input to any review of species and habitat types of EU conservation concern.

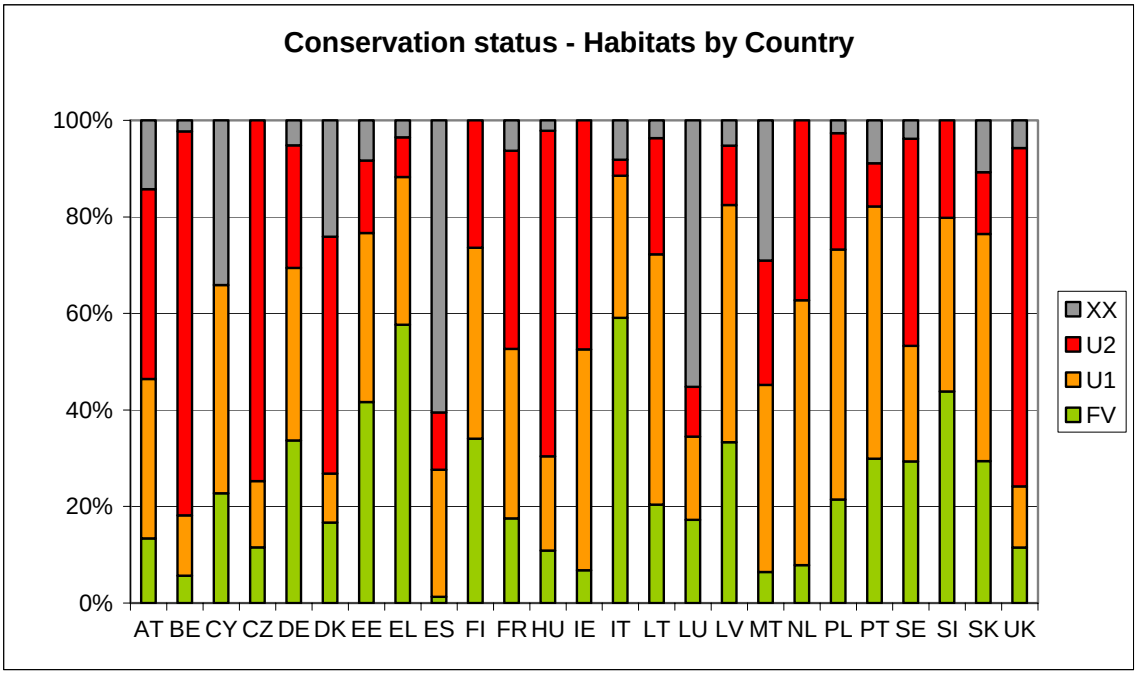


Figure 7: Preliminary conservation status assessment per country for habitat types of Community interest. FV = favourable; U1 = unfavourable inadequate; U2 = unfavourable bad; XX = unknown status (Source European Topic Centre for Biodiversity).

Following up the Article 17 conservation status assessment exercise, the Commission has also started a new initiative in streamlining reporting under the Birds and the Habitats Directive. The intention is to have better data available in order to assess, among other things, the effectiveness of the nature directives. An Expert Group on reporting has been established. This will deal not only with a review of the Article 17 exercise but also aims to initiate a similar status and trends assessment for bird species as well as improving the dataflow on Natura 2000.

Red data lists are also being prepared and updated at EU and Member State levels. A red data list for mammals was published in 2007 providing the first comprehensive assessment at the European scale[16]. This shows that nearly one in six (15 %) of Europe's mammal species are threatened, and a further 9 % are close to qualifying for threatened status. The Iberian lynx is now the most threatened wildcat species in the world[17]. The Commission is financially supporting the development of European red data lists are to be prepared for other taxonomic groups: amphibians and reptiles (ready early 2009), dragonflies, butterflies & saproxylic beetles (ready end 2009), molluscs and vascular plants (selected families) (ready end 2010).

European red data lists for birds have been produced by BirdLife International in both 1994 and 2004, allowing for changes in threat status of species to be compared. This shows that the overall condition of Europe's birds has deteriorated over the last decade. For the assessed bird species on the IUCN Red List, extinction risk throughout European regions is increasing

16 http://ec.europa.eu/environment/nature/conservation/species/ema/index.htm

17 http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000newsl/nat21_en.pdf

(Figure 8). However, in August 2007 the journal *Science* published an analysis showing that the Birds Directive has made a significant difference in protecting many of Europe's most threatened birds from further decline[18]. The groundbreaking paper shows that the Birds Directive has clearly helped those species considered to be most at risk, partly through the designation of Special Protection Areas (SPAs).

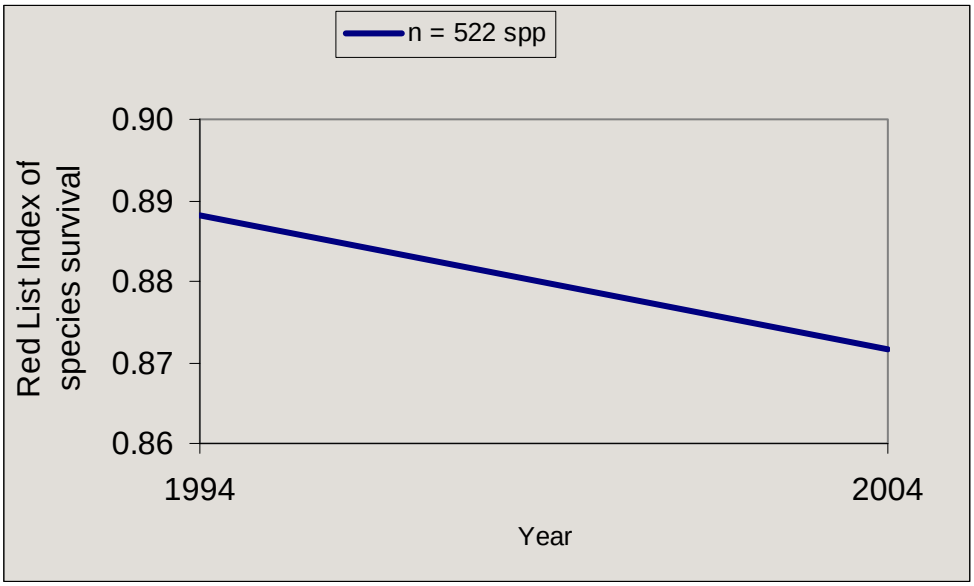


Figure 8: Red List Index (RLI) showing changes in conservation status and increased extinction risk of European bird species between 1994 and 2004 (Source: bird conservation status assessments of BirdLife International; summarised by SEBI 02).

Many countries in the EU have red data lists. 26 out of 27 Member States have red lists mainly for mammals, birds, amphibians, reptiles, fishes and vascular plants. A significant number of these countries are in the process of updating their red list as well as developing red lists for some species.

Conservation action for species

Species action plans continue to be developed as a practical tool to help target conservation action, as evidence by the success of earlier plans for 47 threatened bird species[19]. The Community continues to support the development of action plans for threatened birds involving the update of existing plans (*Acrocephalus paludicola, Marmaronetta anguistirostris, Aquila adalberti*) and the preparation of new bird action plans (*Coracias garullus, Chersophilus duponti, Neophron percnopterus*). Seven new management plans for huntable bird species were finalised in 2007[20], as well as an international action plan for Saker

---

18 International Conservation Policy Delivers Benefits for Birds in Europe by Paul F. Donald, Fiona J. Sanderson, Ian J. Burfield, Stijn M. Bierman, Richard D. Gregory, Zoltan Waliczky http://www.sciencemag.org/cgi/content/full/317/5839/810

19 http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/docs/action_plans_review.pdf

20 http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt_plans_en.htm

Falcon *(Falco cherrug)*[21]. Draft criteria have been prepared for selecting non-bird species for action plans. A first set of action plans is envisaged to be prepared in 2009.

Action plans appear to be also used by many Member States. A total of 13 EU member states have indicated that they have such plans (Figure 9). These countries are Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Lithuania, Slovenia, Spain and Sweden. However, it is generally difficult to determine the number of actions plans per species from available information. Fourteen EU member states have indicated that they do not have species action plans.

More than half of EU member states (23) have plans or programmes for ex-situ conservation. Only four member countries indicated that they do not have ex-situ conservation plans or programmes. For most of these countries, ex-situ conservation is referred to in the NBSAP as submitted to the CBD Secretariat. New possibilities for EU financing of 'ex-situ' conservation actions under LIFE+ when justified for species conservation linked to delivery of the EU biodiversity action plan.

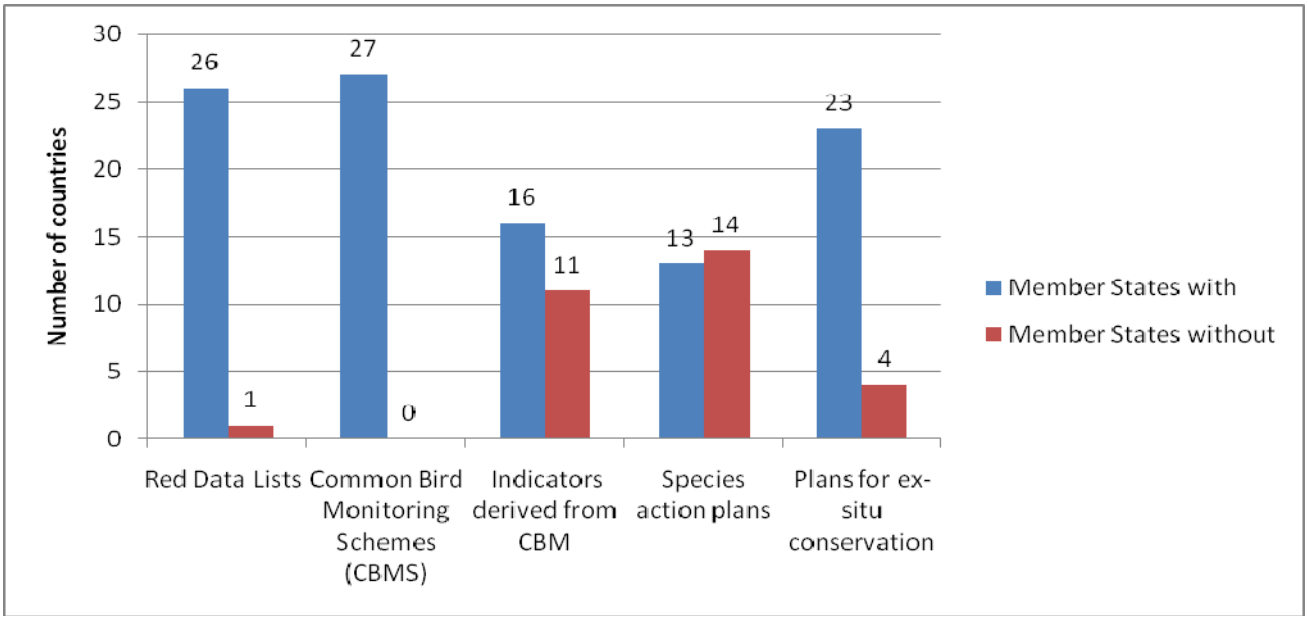


Figure 9: Number of EU Member States (MS) with Red Data Lists, Common Bird Monitoring Schemes (CBM), indicators derived from CBM, species action plans and with plans for ex-situ conservation.

All 27 EU member states have Common Bird Monitoring Schemes and programmes as shown in Figure 9. Some countries monitor single bird species, for example raptors in Malta. According to information from Member States, a total of 16 EU countries have national indicators derived from common bird monitoring schemes. 11 EU member states do not appear to have national indicators derived from common bird monitoring schemes.

As birds are considered to be highly representative of biodiversity and the integrity of ecosystems the common bird monitoring scheme has been used to develop a biodiversity index of common birds (Figure 10). Of the more common bird species, forest and particularly farmland birds have declined. The initial steep decline of farmland birds is associated with increasing agricultural specialisation and intensity in some areas, and large-scale

[21] http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/index_en.htm

marginalisation and land abandonment in others. The falling trend has levelled off since the late 1980s, partly because of stabilising inputs of nutrient and pesticides in the EU-15 and partly because of drastically lower inputs in EU-10 as a result of political reforms and the resulting economic crisis in the agricultural sector. Renewed agricultural intensification in the eastern regions, combined with further land abandonment throughout Europe, could lead to further decline.

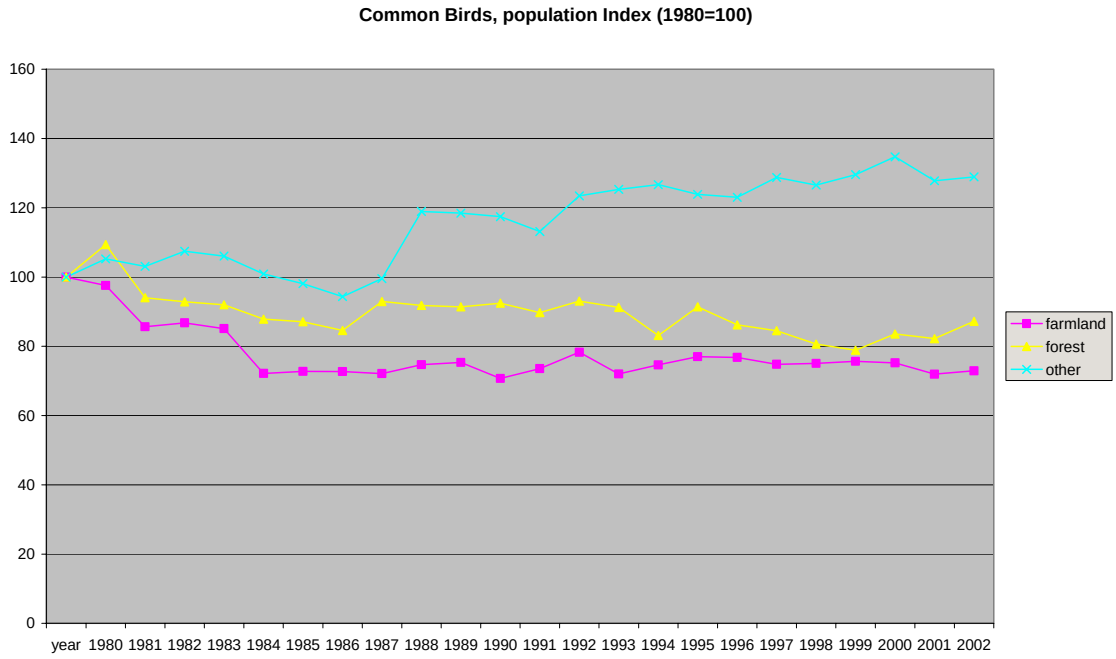


Figure 10: Common birds population index (Source: European Bird Census Committee, Birdlife International, Royal Society for the Protection of Birds, Statistics Netherlands – see also SEBI 01).

Over the past decade, grassland butterflies have suffered even bigger declines than birds, with a reduction of grassland butterfly abundance by almost 50%, with little sign of improvement.

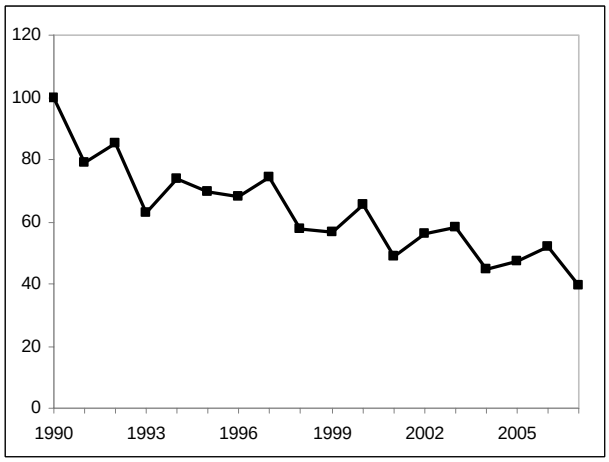


Figure 11: Trends in grassland butterfly species from Butterfly Monitoring Schemes in nine countries (Source: De Vlinderstichting/Butterfly Conservation Europe – see SEBI 2010 indicator 01 for further details)

The Commission has provided guidance for the protection of species under the nature directives. A guide on the strict protection of animal species listed in Annex IV of the Habitats Directive also covers the relevant derogation provisions of the Directive[22]. The guide on sustainable hunting under the Birds Directive[23] has been updated to take account of recent case-law from the European Court of Justice. The Commission has prepared EU guidelines for management plans for large carnivores promoting best practice and providing guidance on population level management planning[24].

Target 1.4 All above targets applied for Acceeding Countries from date of accession

Bulgaria and Romania have been required to apply the nature directives since their accession on 1 January 2007. Assessments of their progress are being incorporated into overall evaluations for Member States. Bulgaria had submitted part of its national Special Protection Areas (SPAs) and potential Sites of Community Importance (pSCIs) lists by the start of 2008. Romania had submitted the pSCIs list in mid-2007 and its list of SPAs in December 2007. The level of designation of both SPAs is being evaluated in 2008. A biogeographic seminar to assess the pSCI for the 5 biogeographic regions concerned by these new Member States took place in June 2008.

Target A.1.5: For those EU Outermost Regions not covered by the nature directives, the aim is to ensure that valued biodiversity sites and species are not in a worsening conservation status by 2010 and that the majority of valued sites and species are moving towards a favourable conservation status by 2013.

An ERA-NET NET BIOME Community-funded network for biodiversity in the outermost regions was launched in September 2006.

The islands of the Canaries, Azores and Madeira all fall within the scope of protection of the Birds and Habitats Directive, contributing the Macaronesian Region, with a network of Natura 2000 sites at an advanced state of development.

A European Conference on Biodiversity and Climate Change in the Outermost Regions was held in La Réunion, from 7 to 11 July 2008[25]. This conference brought together for the first time representatives of all Outermost Regions (ORs) and Overseas Countries and Territories (OCTs). The participants agreed that there is a need for EU member states and the European Commission, together with OCTs and ORs, to establish a voluntary scheme for the protection of species and habitats, inspired by the Natura 2000 approach. This scheme should be flexible, adapted to the local situation, balance conservation and development needs and take existing mechanisms and tools into account. The implementation of the scheme should be based on local commitment and shared financing. The importance of conservation at species level outside protected areas should be highlighted and priority should be given to globally threatened species. The elaboration of restoration or management plans is only a first step in the process that has to be followed by effective implementation. Networking among existing

22 http://ec.europa.eu/environment/nature/conservation/species/guidance/index_en.htm

23 http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/guide_en.htm, available in 23 EU languages.

24 http://ec.europa.eu/environment/nature/conservation/species/carnivores/index_en.htm

25 http://www.reunion2008.eu/pages/en/en-home.html

national parks and other protected areas in order to harmonise monitoring, exchange best practices and share data is very valuable.

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

A. Context

Agriculture, in managing a large part of the EU territory, conserves genes, species and habitats. However, in recent decades, intensification and specialisation, and at the same time marginalisation and under-utilisation of land have resulted in significant biodiversity loss. The Common Agricultural Policy (CAP), together with broader developmental dynamics of the agricultural sector, was one of the drivers for these processes, but has since 1992 been adapted to better integrate biodiversity needs. The new Rural Development Regulation[26] provides *inter alia* for enhanced support for Natura 2000, maintains agri-environment measures and payments for areas with handicaps and provides for a set of measures in support of sustainable forest management. Increasing use of agri-environmental measures, organic farming and the support of Less Favoured Areas (LFA) and other pro-biodiversity instruments (e.g. cross-compliance, single farm payment (decoupling) and modulation) have favoured farmland biodiversity.

Key actions of the Objective include optimising the use of available measures under the reformed CAP, notably to prevent intensification or abandonment of High Nature Value farmland, woodland and forest and supporting their restoration; implementing the Forest Action Plan including measures to prevent and combat forest fires; advancing implementation of key environmental framework directives and thematic strategies which reduce pressures on biodiversity, notably by improving the quality of freshwater and of soils, and by reducing diffuse pollutant pressures (e.g. airborne acidifying and eutrophicating substances, nitrates from farm sources, pesticides).

B. Progress assessment

AGRICULTURAL & RURAL DEVELOPMENT POLICY, FOREST POLICY

Target A2.1 Member States have optimised use of opportunities under agricultural, rural development and forest policy to benefit biodiversity 2007-2013

Rural Development Programmes

Rural Development Programmes (RDPs) funded under Pillar 2 of the CAP by the European

[26] Council Regulation (EC) No 1698/2005, OJ L 277, 21.10.2005, p.1.

Agricultural Fund for Rural Development (EAFRD)[27] provide the principal means of supporting biodiversity protection, management and restoration measures in agricultural and forest habitats. The rural development policy gives the Member States possibilities to support measures aiming at preserving biodiversity: under Axis 1, measures on training, information and advisory services; under Axis 2, land management and non-productive investment measures and under Axis 3, conservation and measures for the conservation and upgrading of the natural heritage allowing the support for the drawing-up of management plans related to Natura 2000 sites (e.g. depending on implementation by the Member State). The most important measures are primarily the ones available under Axis 2 of the EAFRD, with a 44% (approximately EUR 39.6 billion) share of total EAFRD for 2007-2013.

The proportion of Pillar 2 spending that is allocated to Axis 2 measures (of which Natura 2000 payments and payments linked to Directive 2000/60/EC, Agri-environment payments, Forest-environment payments, Forest Natura payments are the most important ones that benefit biodiversity) provides a broad indication of the degree to which Members States are using RDPs to support biodiversity. An analysis of EAFRD expenditure in all approved RDPs indicates that the budgetary emphasis placed on environmental measures varies considerably, with Finland, Ireland, the UK, Austria and Sweden giving a particularly high priority to Axis 2 measures. Furthermore, there does not seem to be any clear relationship between the allocation of spending on Axis 2 measures and the proportion of Natura 2000 habitats and other habitats of High Natural Value in Member States. In particular Romania, Bulgaria, Latvia, Hungary, Poland and Greece have large areas of semi-natural farmland and forest habitat but less than 35% of their RDP budget allocated to Axis 2 measures. In some of these countries, such as Romania, Bulgaria and Latvia, this may reflect the greater priority given to addressing socio-economic needs, although such a conclusion is bound up with considerations of the cost of delivery of positive results for biodiversity (e.g. the cost is likely to be higher in the EU-15 than amongst the new Member States).

The allocations for each of the above mentioned four measures are therefore provided in (Table 1) in terms of their percentage of EAFRD expenditure.

	EAFRD total (million €)	% for Axis 2	EAFRD Axis 2 (million €)	Agri-environment schemes (% of total EAFRD)	Natura 2000 payments – agriculture (% of total EAFRD)	Natura 2000 payments – forest (% of total EAFRD)	Forest-environment (% of total EAFRD)
Austria	3 911	72.31	2 829	46.04	0.05	0.06	0.19
Belgium - Flanders	225	25	56	22.48	0.58	-	-
Belgium - Wallonia	194	48.46	94	37.64	1.55		-
Bulgaria	2 609	24.43	637	13.68	-	-	-
Czech republic	2 816	55.20	1 554	30.16	1.71	0.35	0.45
Cyprus	163	43.42	71	24.3	-	-	0.31
Denmark	445	63.34	282	46.03	-	-	0.57

[27] Council Regulation 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development, OJ L 277, 21.10.200.

Estonia	715	37.44	268	23.61	0.97	3.52	-
Finland Aland region	17	67.21	12	42.26	-	-	-
Finland mainland	2 062	73.40	1 514	31.53	-	-	-
France - Hexagone	5 727	53.77	3 080	15.77	-	-	-
France -Corse	83	60.96	51	11.02	-	-	0.07
France - Guadeloupe	138	15.03	21	9.74	-	-	-
France - Guyane	74	10.09	8	2.22	-	-	-
France - Martinique	100	16.24	16	6.60	-	-	-
France - Reunion	319	16.34	52	4.25	-	-	-
Germany	8 113	40.39	3 276	25.13	1.29	0.18	0.35
Greece	3 707	34.97	1 297	18.19	0.16	0.2	-
Hungary	3 806	32.85	1 250	22.96	1.01	-	1.80
Italy	8 292	43.28	3 589	23.11	0.10	0.05	0.27
Ireland	2 340	79.57	1 862	49.11	9.43	-	-
Latvia	1 041	28.05	292	12.3	0.99	1.7	-
Lithuania	1 743	37.84	660	16.75	0.34	1.17	0.46
Luxemburg	90	58.87	53	29.74	-	-	0.18
Malta	77	26.12	20	10.99	-	-	-
Netherlands	487	29.74	145	22.32	-	-	-
Poland	13 230	33.54	4 437	13.93	-	-	-
Portugal Mainland	3 468	41.76	1 448	10.20	-	-	0.33
Portugal Azores	274	41.9	115	15.67	0.36	0.36	0.07
Portugal Madeira	175	29.96	52	6.2	-	0.02	-
Romania	8 023	23.44	1 881	9.85	-	-	-
Slovakia	1 969	50	985	13.62	0.14	0.29	1.01
Slovenia	900	52.22	470	27.13	-	-	-
Spain	7 214	38.56	2 782	14.26	0.14	-	0.70)
Sweden	1 826	69.06	1 261	53.83	-	-	-
UK*	4 441	72.80	3 233	52.77	-	-	0.72
Total EUR	**90 868**	**43.65**	**39 650**	**22.32**	**0.52**	**0.12**	**0.29**

Table 1: Allocation, as at 9 October 2008, of EAFRD resources in Member States, for the period 2007-2013[28]

- Empty boxes mean that Members States did not use the relevant measure of the RDP.

[28] Figures may be subject to change over time as MSs introduce modifications to their RDPs.

Source: European Commission

Of these four measures, agri-environment payments, account for the majority of EAFRD expenditure, with approximately 22% of RDP expenditure (approximately EUR 20.3 billion of EAFRD fund) across all Member States. But, there is considerable variation in the proportion spent amongst the Members States. Sweden allocates the greatest proportion of RDP expenditure to this measure (53.8%), with Austria, Belgium (Wallonia region), Denmark, Finland, Ireland and the UK each allocating in excess of 30% of expenditure. At the other extreme, 11 Member States allocate less than 20% of their RDP budgets to the agri-environment measure, including Member States with large areas of Natura 2000 and other areas of High Natural Value farmland, such as Bulgaria, Portugal, Greece, Spain and Romania.

In some cases the EAFRD and required co-financing expenditure is supplemented with additional national payments. In most cases this does not increase the proportion of spending on agri-environment measures substantially (or any other of the measures described here). However, in other cases, additional national financing does significantly increase agri-environment spending e.g. in France (from 15.8% to 25.1% of total public expenditure) and Cyprus (24.3% to 28.4%).

Budget allocations for the other three Axis 2 measures that may provide substantial biodiversity benefits are small in all Member States and absent in many. Of particular concern is that allocations for dedicated Natura 2000 measures (agriculture and forest) are very low, 0.64% of total EAFRD expenditure, approximately EUR 577 million. These measures were included in the rural development regulation in order to support conservation management on Natura sites and the implementation of the Water Framework Directive (WFD)[29]. In total, the measure for Natura 2000 payments for agricultural land will be used in only 14 Member States, with an allocated expenditure of EUR 470 million[30]. Ireland is the only country that allocates a substantial proportion (9.4%) of its budget to such Natura measures. Only 10 Member States are expected to use Natura 2000 payments for forests with an allocation of approximately EUR 108 million. The most public money allocated to this measure is in Estonia, which plans to spend EUR 25 million of EAFRD resources, about 3.52% of its RDP budget.

The reason for the low allocations for dedicated Natura measures is probably because many countries have already established systems for managing Natura 2000 sites that are already supported by established agri-environment schemes (e.g. UK). Another important reason is the fact that in many Member States uptake of Natura measures is constrained by a lack of management plans for Natura 2000 sites. Some of the Member States concerned have used the possibility to support the drawing up of the management plans under axis 3 (measure "conservation and upgrading of the rural heritage").

---

29 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

30 In absence of implementing rules for WFD payments under article 38 of Reg. 1698/2005, the MSs can only use this measure for Natura 2000 support. Therefore, these resources should only be dedicated to Natura 2000 sites.

Less favoured areas

In addition to the measures described above, the less favoured area (LFA) measure may provide some biodiversity benefits where it supports traditional low intensity farming systems that maintain certain semi-natural habitats and other high nature value farmland. Approximately EUR 12.6 billion will be spent on the LFA measure among all approved rural development programmes. France, Finland and the German region of Bayern allocates 30%, other mountainous areas such as Austria, Scotland, Wales, Ireland and the Italian region of Trento dedicate 20% or more in excess their RDP budget to LFAs.

Non productive investments measures for agriculture and forestry areas

Two other measures under Axis 2 may also provide important biodiversity benefits: the non-productive investment measures for agriculture and for forests. These measures are sometimes used to provide one-off capital grants, e.g. for habitat restoration works. Spending on these amounts to some EUR 463 million of EAFRD funds for non-productive agricultural investments (with high allocations in the UK, parts of Italy and Denmark) and EUR 809 million of EAFRD funds for non-productive forestry investments (with significant allocations in several countries including parts of Germany, Italy, Spain and the UK).

Agricultural cross-compliance

Beneficiaries of CAP payments must comply with a range of requirements and standards, or risk reductions in or cancellations of their payment[31]. There are two sets of requirements that must be complied with under cross-compliance. Firstly, the 'Statutory Management Requirements' (SMR), which are derived from 19 items of EU legislation in the areas of the environment, public health and animal health and welfare, including requirements related to the Birds and Habitats Directives. Secondly, the standards that set the framework for Good Agricultural and Environmental Condition (GAEC)[32]. This framework directs Member States to introduce standards to address soil erosion, soil structure, soil organic matter and the minimum maintenance of habitats.

There are four important types of GAEC minimum maintenance measure that may provide significant biodiversity benefits (minimum livestock stocking rates and appropriate management regimes, protection of permanent pasture, retention of landscape features, others). The SMR and GAEC standards provide a broad baseline coverage, mandatory for all farmers receiving direct payments and most of the area-related rural development payments. Beyond cross-compliance and other standards, the agri-environmental measures reward farmers for the voluntary provision of environmental benefits, aiming at e.g. the management or enhancement of habitats.

---

31 As set out by Council Regulation 1782/2003 of 29 September 2003 establishing common rules for direct support schemes for farmers, OJ L 270, 21.10.2003 and by Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). Under the Rural Development policy, for beneficiaries of agri-environment measures, cross-compliance includes additional requirements related to fertiliser and plant protection products use identified in the programme pursuant to art.39 of Regulation (EC) N°1698/2005.

32 listed in Annex IV of Regulation 1782/2003.

The GAEC standards on maintenance of minimum livestock rates and appropriate management regimes and on protection of permanent pasture are important to maintain the ecological value of grasslands. The standard on retention of landscape features, such as hedgerows, ponds and trees, can provide important habitat components (e.g. breeding sites) and help to maintain ecological connectivity. Other GAEC standards include ones like measures to avoid cultivation close to watercourses (e.g. Austria and the UK), avoid cultivation, fertiliser and pesticide applications close to hedgerows (e.g. the UK), maintain crop diversity and provide for a minimum environmental surface (e.g. France), retain buffer strips along water bodies (Finland) and retain stone walls on terraced slopes (Malta).

An evaluation study on the application of cross compliance was carried out between July 2006 and June 2007, the report of which can be found on the following website: http://ec.europa.eu/agriculture/eval/reports/cross_compliance/index_en.htm

As part of the health check of the 2003 CAP reform[33], the Commission has proposed to strengthen the standard on landscape features under GAEC aimed at the promotion of biodiversity. This will contribute to retaining the environmental benefits of set-aside which the Commission proposes to abolish.

High nature value farmland and forest area

High Nature Value farmland provide habitat for a wide range of species. They are however under threat from intensification and land abandonment. Promoting conservation and sustainable farming practices in these areas is crucial for biodiversity. Area of High Nature Value (HNV) farmland is one of 35 environmental indicators for agriculture developed by EEA under the steering of the Commission in the framework of the IRENA operation[34]. In this regard, a map of High Nature Value farmland has been updated by the European Environment Agency and the Joint Research Centre[35]. In parallel, the Commission has contracted a study on an HNV indicator for rural development evaluation as well as a report providing guidance to the Member States on the application of the HNV impact indicator[36]. These will be used as biodiversity-related indicators in the context of the Common Monitoring and Evaluation Framework (CMEF) for rural development. This will ascertain the extent to which measures under the rural development policy are delivering biodiversity benefits.

33 COM(2008)306.

34 Publication in September 2006 of a Communication on agri-environment indicators (COM(2006(508)) based on IRENA work.

35 For more details, see http://reports.eea.europa.eu/state_of_environment_report_2007_1/en/chapter4.pdf

36 For more details, see http://ec.europa.eu/agriculture/analysis/external/evaluation/index_en.htm

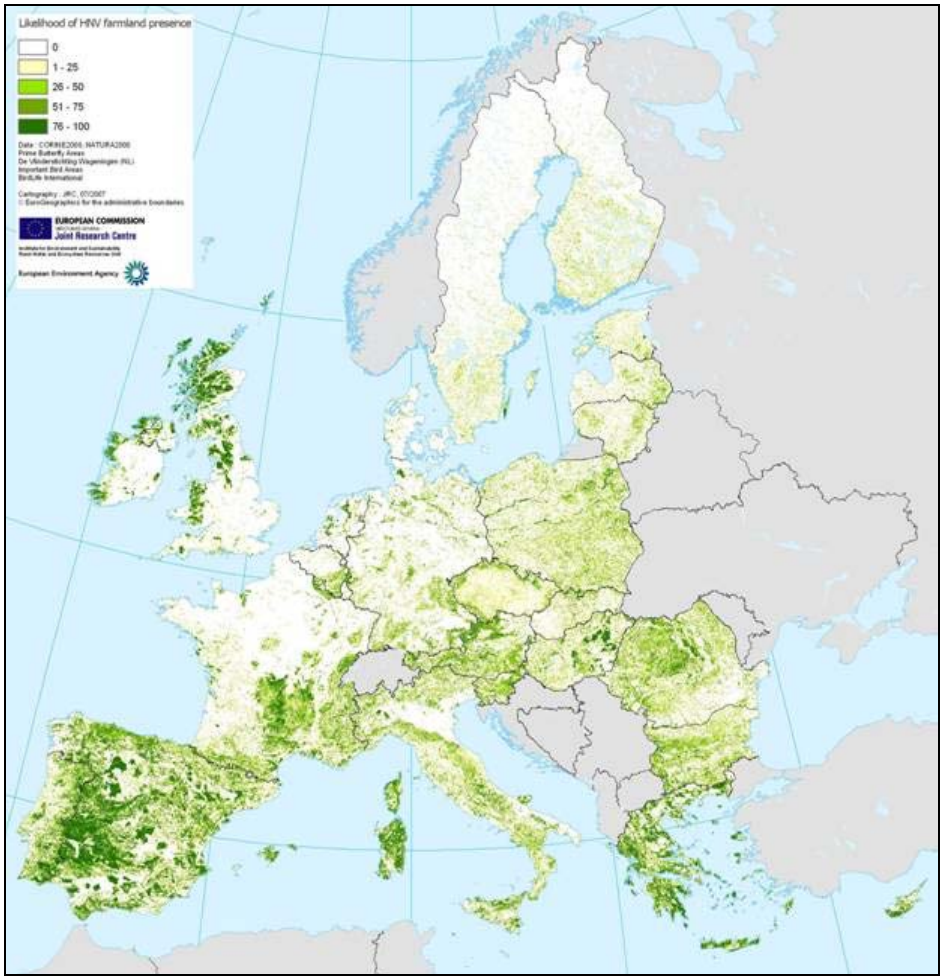


Figure 12: High nature value farmland areas

Agricultural genetic diversity

Rural Development Article 39 (1)-(4) of Regulation (EC) No 1698/2005, and Article 27 of Regulation (EC) No 1974/2006 offer the possibility to promote agri-environment measures which may support the rearing of "farm animals of local breeds indigenous to the area and in danger of being lost to farming", and the preservation of "plant genetic resources naturally adapted to the local and regional conditions and under threat of genetic erosion". Article 39(5) of Regulation 1698/2005, and Article 28 of Regulation 1974/2006 may also support the conservation of genetic resources in operations not covered by the above-mentioned measures supporting the preservation of endangered animal and plant genetic resources.

The Community programme on the conservation, characterisation, collection and utilisation of genetic resources in agriculture[37] promotes genetic diversity in agriculture. The Community Programme has given rise to 17 actions, involving 179 partners located in 25 Member States and 12 non EU countries, and a total EU co-funding of EUR 8.9 million. 59% of the actions concern plant, 12% tree and 29% animal species. The actions started in 2007 and have a maximum duration of 4 years[38].

---

37 Regulation (EC) No 870/2004.

38 For more details, see http://ec.europa.eu/agriculture/envir/biodiv/genres/index_en.htm

Preparation of Commission Directives on the acceptance and marketing of landraces and varieties which are naturally adapted to the local and regional conditions and threatened by genetic erosion covering seed of agricultural plant species, vegetables, vegetable propagating and planting material other than seeds and fodder plant seed mixtures and adapting Community zootechnical legislation with view to protect animal genetic resources are going on.

According to the 3rd National Reports to the CBD, most Member States have developed targets to conserve genetic diversity and several states, such as Austria, Belgium and Germany have incorporated such targets in their national BAPs. Moreover, there are a wide range of activities underway that contribute to the EU BAP target as surveys and preparation of inventories of plant and animal breeds etc., establishment of seed and germplasm banks, and support for the breeding of native, traditional and rare breeds of plants and livestock. The use of traditional livestock breed is often supported through RDP measures (e.g. in Bulgaria, Estonia, Ireland, Romania and Sweden).

Afforestation / deforestation policies and biodiversity

Five Member States out of the 27 indicated that they have national or sub-national strategies regulating afforestation and deforestation plans (i.e. Belgium, Denmark, Hungary, Lithuania and the UK). Most countries indicated that afforestation and deforestation activities were regulated in some way, usually involving a requirement for some form of authorisation after completion of a Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA). Deforestation activities appear to be regulated in most countries, but some do not appear to control afforestation activities (though in some case this may be because it is not a significant issue in the Member State).

Target 2.2 Risks to soil biodiversity in the EU substantially reduced by 2013

Soil protection and biodiversity

Bulgaria, the Czech Republic, Estonia and the Netherlands indicated in their questionnaire on actions being taken that they have developed soil biodiversity indicators and several others are developing them, though little information is provided on the scope and type of indicators that have been developed or how they will be used.

Several Member States (including Belgium, Bulgaria, the Czech Republic, Estonia, Poland, Spain and Sweden) indicated that they have identified areas where soil biodiversity is at risk. In most cases there is no detailed information provided on the factors being taken into account in the risk assessments. In many cases the assessments appear to focus on erosion risks and/or desertification, whilst other risks are taken into account in others (e.g. acidification or contamination in Sweden).

Target 2.3 Substantial progress made towards 'good ecological status' of freshwaters by 2010 and further substantial progress made by 2013

Ecological status of freshwaters

The principal measures for improving aquatic environment is the Water Framework Directive (WFD), which aims to establish a framework to protect inland surface waters, transitional waters, coastal waters and groundwater in order to prevent the deterioration of aquatic ecosystems and protect and enhance the status of aquatic ecosystems. The key aim is to put in place measures to achieve the 'good status' of all waters by December 2015. River Basin Management Plans and the programme of environmental measures for each river basin district must be in place by 22 December 2009.

According to the overview done by the European Commission's WFD Scoreboard, as of 20 April 2008, most states had met the reporting requirements: communication on the legal instruments that transpose the WFD submitted to the European Commission except of Italy and Luxembourg; reports for the inter-calibration of sites sent by all Member States; River Basin District Reports (Article 3 reports) provided except for Spain; River Basin District Analysis Reports (Article 5 reports) provided; monitoring report (Article 8 Report) obligations met except for Greece and Malta. Commission assessment in March 2007 of transposition procedures and the adequacy of reports did reveal a number of significant shortcomings, especially regarding the legal transposition of the Directive.

Target 2.4 Principal pollutant pressures on terrestrial and freshwater biodiversity substantially reduced by 2010, and again by 2013

Reduction of pollution impacts on biodiversity

The Commission adopted a package to improve the EU policy on industrial emissions on 21 December 2007. This includes a Proposal for a Directive on industrial emissions that recasts seven existing Directives (IPPC Directive, the Large Combustion Plants Directive, the Waste Incineration Directive, the Solvents Emissions Directive and 3 Directives on Titanium Dioxide) related to industrial emissions into a single clear and coherent legislative instrument.

The IPPC Directive (2008/1/EC) requires installations falling under its scope to operate in accordance with permits including emission limit values based on the best available techniques (BAT), designed to prevent and, where that is not practicable, generally to reduce emissions and the impact to the environment as a whole. The prevention or reduction of emissions to air, water and soil should therefore be dealt with in the environmental permits issued in accordance with the IPPC Directive. The key deadline for the full implementation of the Directive was 30/10/2007.

EPER is the European Pollutant Emission Register, the first European-wide register of industrial emissions into air and water. According to the EPER Decision, Member States have to produce a triennial report, which covers the emissions of 50 pollutants to be included if the threshold values indicated in Annex A1 of the EPER Decision are exceeded. From 2007 reporting will be made according to Regulation 2006/166/EC concerning the establishment of a European Pollutant Release and Transfer Registers that replaces EPER.

The Waste Incineration Directive (2000/76/EC) requires the Commission to report on the application of the Directive, in particular for new plants and on the progress achieved in emission control techniques and experience in waste management. The Commission's Communication 'Towards on improved policy on industrial emissions' summarises this report.

The 4th Implementation Report on Urban Waste Water Directive (91/271/EEC) was published on 22 March 2007 linked to the Communication “Towards Sustainable Water Management in the European Union”. The Executive Summary presents the overall picture in the EU, whilst a more detailed report presents the status of implementation in each Member State. (http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm)

The Commission adopted a 'Common Implementation Strategy for the Water Framework Directive' in 2006 as the progress and work programme for 2007-2009 for the implementation of the Water Framework Directive (2000/60/EC). Agreement in 2nd reading was achieved in June 2008 for a Daughter Directive under the Water Framework Directive setting environmental quality standards for 41 dangerous chemical substances (including 33 priority substances and 8 other pollutants) that pose a particular risk to animal and plant life in the aquatic environment and to human health. Publication of the new Directive is foreseen in early 2009.

A study to complement the priority list of endocrine disruptors with a focus on Low Production Volume Chemicals (LPVC) was completed end of December 2006. The third

implementation report of the Community Strategy for Endocrine Disrupters was published in November 2007 (SEC (2007) 1635).

REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) (EC 1907/2006) entered into force on 1 June 2007. The Regulation will result in assessing risks to human health and the environment of ca. 30 000 chemical substances being currently used in the EU. A Framework Directive on the Sustainable Use of Pesticides was proposed to reduce the risks to human health and the environment from the use of pesticides. This new proposal is accompanied by a revision of existing legislation regarding the placing of plant protection products on the market and by two additional legislative proposals: one on the environmental protection requirements to be met by new pesticide application equipment placed on the market and the other one on the collection of statistics on plant protection products. The legislative adoption procedure of the Framework Directive has started in 2006 and should be terminated in 2009.

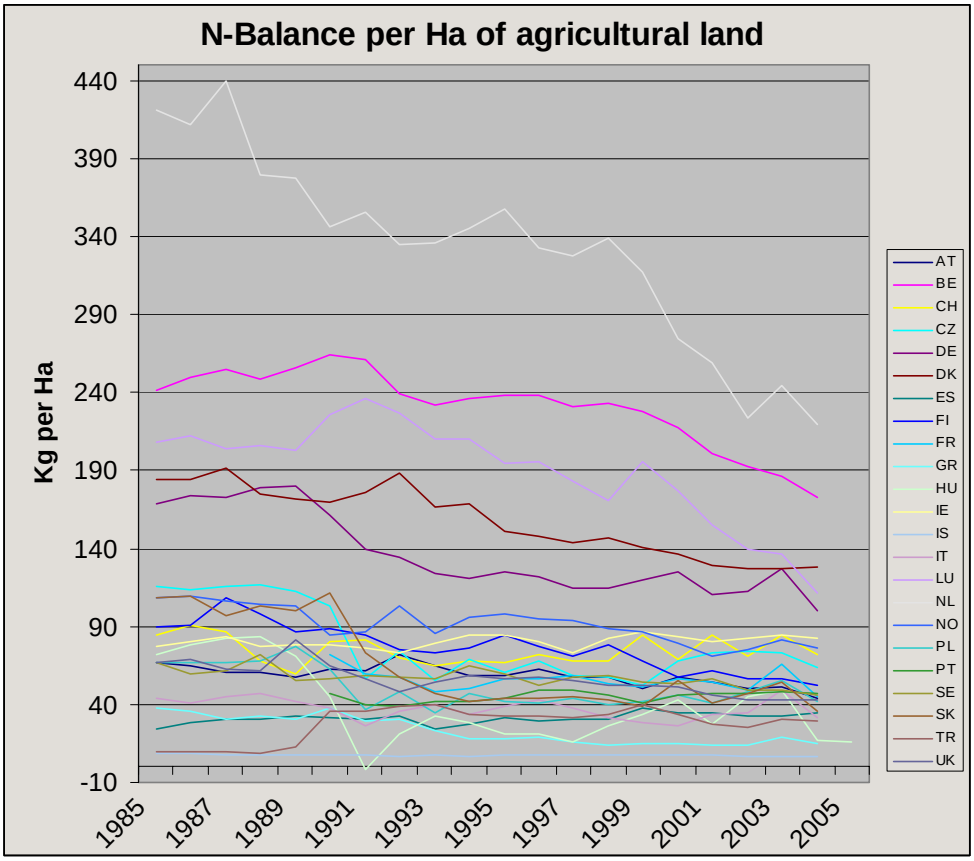


Figure 13: N-balance per ha of agricultural land

Source: OECD, 2008[39]

A nutrient balance describes the difference between all nutrient inputs and outputs on agricultural land. A positive balance or surplus reflects inputs that are, in excess of crop and forage needs, and can result in the loss of nutrients to water bodies, decreasing their quality

[39] OECD (2008), Environmental Performance of Agriculture in OECD countries since 1990, Paris, France, www.oecd.org/tad/env/indicators.

and promoting eutrophication. Surplus nitrogen can also be lost to air as ammonia and greenhouse gases.

All European countries exhibit a nitrogen surplus, though overall agricultural nitrogen surpluses declined (Figure 13), potentially reducing the environmental pressures on soil, water and air. The adoption of nutrient management plans and environmental farm plans has had a key role in this reduction. It is, however, important not only to consider rates of surplus decline, but the absolute value too. Belgium and the Netherlands, for example, show significant decreases; however, nutrient surpluses in these two countries currently remain much higher than the average across all countries.

Acidification, eutrophication and ground-level ozone exposure are the most significant threats to biodiversity in Europe resulting from air pollution. The National Emission Ceilings Directive[40] (NEC Directive) was therefore established to reduce emissions of the four pollutants responsible for these threats, namely sulphur oxides (SO_x), nitrogen oxides (NO_x), ammonia (NH_3) and non-methane volatile organic compounds (NMVOC). The NEC Directive sets ceilings for each Member State for emissions within their boundaries of each of these pollutants, which must be complied with by 2010. Although, the Directive allows Member States to decide how to comply, they are obliged to provide annual reports with emissions inventories and projections to 2010, and to draw up programmes for the progressive reduction of their emissions to meet the 2010 ceilings. A Communication preparing a legislative proposal has been worked out for a revision of the NEC Directive in order to lay down national emission ceilings for 2020 achievable with cost-effective measures at national level on top of recent Commission policy proposals for industrial installations, new emission standards for heavy duty vehicles, the Climate action and renewable energy package and the recent IMO agreement, which all together already will reduce emissions significantly, but not sufficiently to meet all the objectives of the Thematic Strategy on Air Pollution. The proposal will also include a provision to monitor the effects on aquatic and terrestrial ecosystems within all types of Natura 2000 sites. (For background documentation prepared for the revision of the NECD see http://ec.europa.eu/environment/air/pollutants/iam_nec_dir.htm)

Emission projections provided by the Member States can be based on three different scenarios (AEA Technology, 2007[41]). The 'with measures' scenario takes into account all currently implemented and adopted policies and measures. The second scenario, ‘with additional measures’, considers all planned policies and measures. Finally, the ‘without measures’ scenario (often referred to as ‘business as usual’), should exclude all policies and measures implemented, adopted or planned after the chosen base-line year for the projection. Data based on the ‘with measures’ scenario have been used for the analysis in this report. The latest emission data and projections from Member States (Table 2) show that some Member States have already succeeded in keeping their emissions below their agreed ceilings. It is expected that the majority of Member States will reduce their emissions of all four pollutants and are expected to comply with their 2010 SO_x, NH_3 and NMVOC emission ceilings. This especially refers to the EU-12 Member States, although some of them expect increases in their emissions due to future economic development.

---

40 Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants.

41 AEA Technology (2007). *Evaluation of national plans submitted in 2006 under the National Emission Ceilings Directive 2001/81/EC.* European Commission (DG Environment) service contract 070501/2006/453041/MAR/C5. AEA/ED05435, September 2007. http://ec.europa.eu/environment/air/pdf/nec_report.pdf

Table 2: Comparison of Member States emission ceilings with Member States current emissions and WM projections 2010

Member State	NO_x Difference from NECD %		SO_x		NH_3		NMVOC	
	2006*	2010	2006*	2010	2006*	2010	2006*	2010
Austria[1]	+54	+25	-48	-52	-3	-8	-3	-6
Belgium	+37	+10	+29	-10	-1	-5	+7	-8
Bulgaria[1]	-6	NA	+7	NA	-89	NA	-19	NA
Cyprus	-31	-21	-10	-15	-71	-100	-30	-43
Czech Republic[1]	-3	-6	-21	-25	-19	-19	-22	-32
Denmark[1]	+27	+6	-162	-176	+13	-5	+29	+7
Estonia[1]	-85	-55	-29	-24	-210	-229	-35	-20
Finland[1]	+4	-13	-59	-13	+14	0	+1	0
France	+40	+27	+17	-9	-5	-7	+22	+1
Germany	+25	+5	+7	-13	+11	+10	+26	-1
Greece[2]	-9	0	+2	0	+1	0	+10	0
Hungary[3]	-7	0	-101	-43	-18	-29	+13	0
Ireland	+47	+34	+30	-27	-6	-14	+9	0
Italy[1]	+20	+6	+0.5	-26	+1	-1	+8	-23
Latvia	-38	-30	-2961	-1920	-202	-193	-109	-123
Lithuania	-79	0	-238	0	-140	0	-18	0
Luxembourg[23]	+27	+22	-33	-74	-27	-27	+10	-25
Malta	+7	+12	+27	+37	-329	+21	-216	-422
Netherlands[1]	+29	+6	+22	+24	+5	-2	-4	-14
Poland[1]	-7	NA	-12	NA	-44	NA	+9	+13
Portugal	+6	-3	+16	-20	-28	-30	+42	+7
Romania	-45	-43	-10	-25	-12	-3	-75	-50
Slovakia	-50	-13	-25	-77	-46	-62	-79	-63
Slovenia	+4	+8	-51	-55	-7	-4	+3	-8
Spain	+38	+30	+34	-77	+16	+5	-102	+21
Sweden	+15	+4	-71	-103	-10	-14	-24	-32
UK	+27	+10	+13	-44	+5	-2	-32	-49
EU25[34]	+23	+8	+5	-39	-5	-7	+13	-5

Note: Calculated percentages are based on the difference between a Member States' most recent emissions/its projections for 2010 and its NECD Ceilings in relation to its emissions/projections. Positive and red marked percentage values indicate that current emissions are above ceilings or that targets will not be achieved by 2010, according to emission projections 'with measures' (WM). Projections used for Hungary are based on the 'without measures' scenario as no other data were available.
NA = no information available/provided
* or other most recent year available
[1] Most recent data from 2005
[2] Most recent NH_3 data from 2000
[3] Most recent data from 2004
[4] Based on NECD Report 2006, EEA. EU25 without Luxembourg as emissions have not been reported at the time of evaluation. EU25 NH_3 without Greece and Luxembourg.
Source: EEA, based on Member States' data submissions in the framework of the NEC Directive

Target 2.5 Flood risk management plans in place and designed in such a way as to prevent and minimise biodiversity loss and optimised biodiversity

Flood Risk Directive[42] as basic legal measure has been adopted in 2007. The first milestone will be the preliminary flood risk assessment (for 2011), to be followed by the preparation of flood hazard maps and flood risk maps (for 2013). The implementation of the Directive is supported by an expert working group established and information exchange on different topics in relation to implementation of this Directive is going on with thematic workshops organised. Issues addressed in 2008 are sustainable land use planning and flood risk management as well as on flood mapping Within the first topic the issue of working with natural processes is also addressed, and in the second topic the issue of mapping potential adverse consequences for the environment will be considered.

Flood risk management plans are to be developed by 2015 for each river basin also in line with the implementation of Water Framework Directive. Certain aspects of flood risk management are also foreseen to be considered in the first river basin management plans currently in preparation to be established by December 2009. As prevention of pollution as a result of floods, as well as hydromorphology and the need to assessing better environmental options before undertaking a new modification to a water body, which could hinder the achievement of the WFD objectives of the water body in question.

[42] Directive 2007/60/EC of the European Parliament and of the Council of 23.10.2007 on the assessment and management of flood risks.

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

A. Context

EU fisheries and aquaculture have had damaging impacts both on commercially harvested fish stocks, and on non–target species and habitats. While recent years have seen progress in integrating biodiversity into fisheries policy, it is too soon to judge effectiveness. However, the reformed Common Fisheries Policy (CFP)[43], when fully implemented, will reduce fishing pressure, improve the status of harvested stocks and better protect non–target species and habitats. The adaption of Marine Strategy Directive (2008/56/EC) and different regulations, strategies on water pollutants has strengthened the conservation of marine environment.

B. Progress assessment

Target 3.1 Substantial progress achieved by 2010 towards 'good ecological status' of the marine environment

Good marine and coastal ecological status

One of the key actions under this BAP target is to establish environmental targets for each marine region. The Marine Strategy Directive establishes European Marine Regions on the basis of geographical and environmental criteria and has expanded the scope of water protection to all marine areas, with the objective of good environmental status for all marine waters, and an obligation for Member States to cooperate and coordinate action in shared marine regions or sub-regions, across administrative and political boundaries. Each Member State, in close cooperation with the relevant other Member States and third countries within a Marine Region, will be required to develop Marine Strategies for its marine waters[44].

The Marine Strategies will contain a detailed assessment of the state of the environment, a definition of 'good environmental status' at regional level and the establishment of clear environmental targets and monitoring programmes[45].

Only 5 out of the 27 Member Sates are non-coastal (Austria, Czech Republic, Hungary, Luxemburg and Slovakia). Currently, 37% of coastal Member States have a dedicated national plan or strategy specific to the marine environment. A further 18% have a strategy or plan in development. A total of 27% do not have a dedicated national strategy for the marine

---

43 COM(2001) 135.

44 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:164:0019:0040:EN:PDF

45 For more information on EU marine policy see http://ec.europa.eu/environment/water/marine/index_en.htm.

environment. In this latter group, however, several Member States do incorporate marine environmental measures into other relevant documents. Germany, for example, includes in their National Biodiversity Strategy the aims to achieve 'good ecological status and chemical quality status' in coastal waters by 2015 and good quality in marine waters by 2021. In other Member States, objectives for the marine environment have been incorporated into legislative documents, such as Romania's Environmental Protection Law and Water Law and Denmark's Marine Environmental Act. Many Member States include measures to prevent and reduce negative impacts on the marine environment caused by fishing activities through their European Fisheries Fund (EFF) Operational Programmes for the period 2007-2013 (see Target A3.4).

All of the coastal Member States are contracting parties to various regional and/or international conventions that contain further obligations aiming the protection of coastal and/or marine environment, like the Mediterranean Action Plan (MAP, 1975), the first-ever Regional Seas Programme under UNEP's umbrella; the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II, 1995) that replaced MAP of 1975; the Barcelona Convention on the protection of biological diversity; the Strategic Action Plan for Protection of Biological Diversity in the Mediterranean Region (SAP BIO) adopted by UNEP-MAP in 2003; the Helsinki Convention (1992) under which the Baltic Sea Action Plan was adopted in 2007; the OSPAR Convention (1992) on the protection of the marine environment of the North-East Atlantic; the Bucharest Convention (1992) on the Protection of the Black Sea Against Pollution which adopted the Black Sea Biodiversity and Landscape Conservation Protocol (BSBLCP) in 2002, including the main objective "to halt losses of currently known threatened species and destruction of their habitats by 2010 arising from human activities in the BSBLCP area and to prevent appearance of new threatened species by human activities".

A range of marine and coastal species (Annex II) and habitat types (Annex I) are protected under the Habitats Directive, some of which require protection under Natura 2000. The first conservation status assessment undertaken in accordance with Article 17 of the Habitats Directive indicates that there are marine features in an unfavourable conservation status in almost all Member States. This assessment is to be completed in the first half of 2009.

Coastal zone policy

Action A3.1.5 of the Biodiversity Action Plan requires implementation and review of the EU Integrated coastal zone management (ICZM) Recommendation[46]. An independent evaluation of ICZM in Europe was undertaken in 2006 (http://ec.europa.eu/environment/iczm/pdf/evaluation_iczm_report.pdf). Up to 2006, nine coastal Member States (41% of 22 with a coastline) have an ICZM strategy or equivalent that has been adopted and a further five Member States (23%) have one in development. The remaining eight countries have no strategy for ICZM (Bulgaria, Denmark, Estonia, Ireland, Italy, Lithuania, Latvia and Sweden). The European Commission launched a contract in 2008 to support the exchange of experiences and best practices in coastal management.

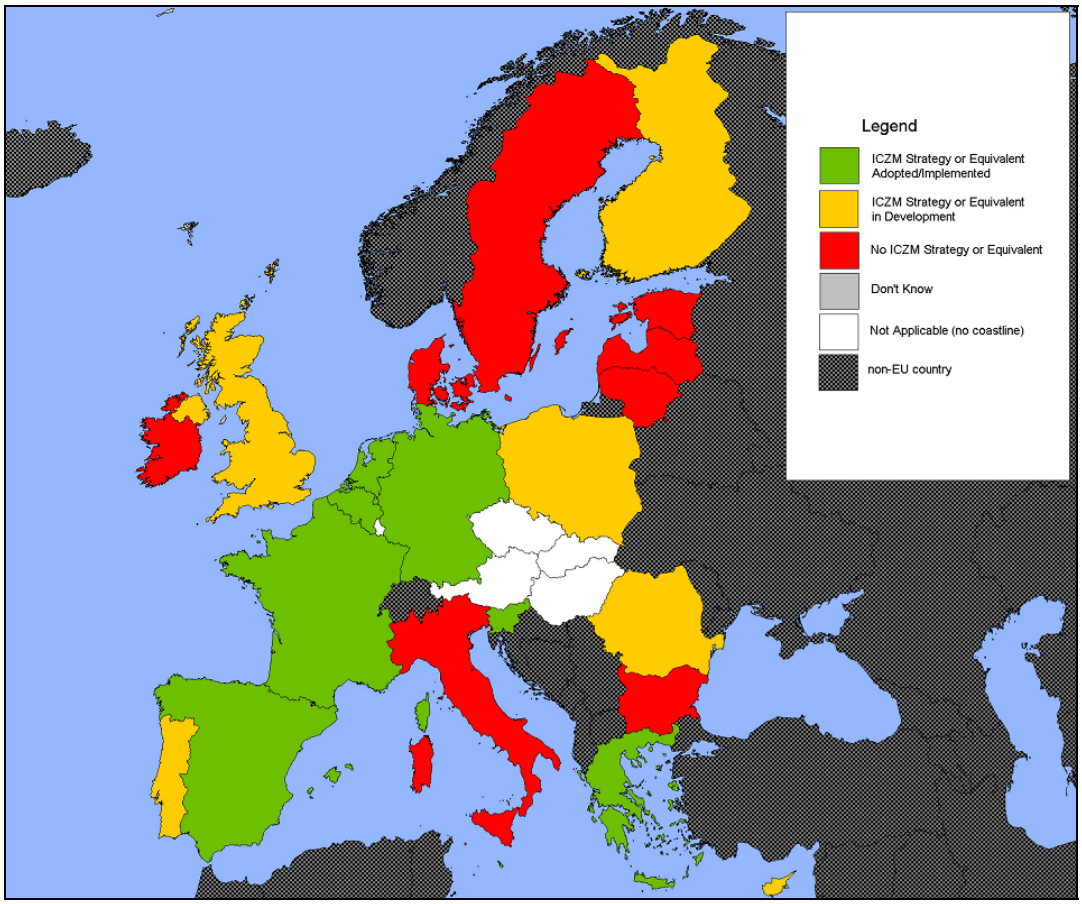


Figure 14: Member States with ICZM Strategy or Equivalent[47]

Target 3.2 Principal pollutant pressures on marine biodiversity substantially reduced by 2010

The European Commission has issued a communication (COM/2006/0863) presenting the current state of Community action in terms of preparedness and response to marine pollution, and indicating how the Commission intends to continue to fully promote its activities to in this field.

46 Integrated Coastal Zone Management: A Strategy for Europe (COM (200) 547).

47 Source: Evaluation of ICZM in Europe (2006).

The European Union established the European Maritime Safety Agency (EMSA) (1406/2002/EC) to strengthen its role in the field of maritime safety and pollution by ships. This Agency provides technical and scientific assistance to Commission and Member States on related matters and fulfils tasks on responses to oil pollution.

The EU Bathing Water Directive (76/160/EEC) was adopted in 1976. In 2006 a new Bathing Water Directive (2006/7/EC) was adopted and will repeal the earlier Directive by 2014 at the latest. Both Directives are currently in application. Bathing waters covered by the Directive are either coastal or inland waters, and must be explicitly authorised (or not prohibited) and traditionally utilised by a large number of people. Swimming pools and waters for therapeutic purposes are not covered. To ensure good bathing water quality, the EU has set limits for microbiological parameters. Member State authorities must test the bathing waters and then classified into categories. According to the 'Quality of Bathing Water: 2007 Bathing Season Summary Report'[48], 95.2% of coastal bathing waters met the mandatory compliance standards across the EU. This represents an overall significant improvement over the past decade. The coastal Member States meeting or exceeding the 2007 EU average for minimum compliance standards were the Netherlands, Latvia, Finland, Greece, Spain, Cyprus, Belgium, Ireland, UK, France, and Malta. The remaining coastal Member States were below the average. The Report also indicated that 86.1% of coastal bathing waters complied with the more stringent guideline standards across the EU. The coastal Member States meeting or exceeding the 2007 EU average for guideline compliance standards were Cyprus, Greece, Italy, the Netherlands, Malta, Spain and Portugal. The remaining coastal Member States were below the average.

Other directives and Community strategies on different sources of pollutants include measures taken to promote the protection of coastal and marine environment together with regulations on terrestrial areas (see Objective 2 Target A2).

Target 3.3 Ecosystem approach to the protection of the seas in place and implying fisheries management measures no later than 2016

Through the European Fisheries Fund (EFF) and National Fisheries Operational Programmes for period 2007-2013, the Biodiversity Action Plan seeks to implement actions beneficial to marine biodiversity. Target A3.3. requires the introduction of fisheries management measures in line with the requirements of the Marine Strategy Directive at a regional level by 2017. Based on information available (Fisheries Operational Programmes, etc.) it was not possible to estimate if an ecosystem approach to fisheries management was in place for twelve (44%) countries, and a further five (19%) countries had fisheries plans that do not incorporate an ecosystem approach (Austria – non coastal; Bulgaria; Denmark; France and Poland). The remaining ten countries either already incorporate ecosystem based approaches in their fisheries management measures (8 Member States, 30%) or have draft plans in development (2 Member States, 7%).

The Commission's Communication of April 2008 to the Council and the European Parliament emphasized the need to integrate the ecosystem approach into the Common Fisheries Policy[49].

[48] http://ec.europa.eu/environment/water/water-bathing/report2008/en_summary.pdf

[49] COM(2008)0187 on the role of the CFP in implementing an ecosystem approach to marine management.

Target 3.4 Substantially enhanced funding provided to environmentally-friendly fisheries management from 2007 onwards

The European Fisheries Fund[50] (EFF, 2007-2013) is designed to secure a sustainable European fishing and aquaculture industry. Assistance under the EFF shall aim to: support the Common Fisheries Policy (CFP) so as to ensure exploitation of living aquatic resources and support aquaculture in order to provide sustainability in economic, environmental and social terms; promote a sustainable balance between resources and the fishing capacity of the Community fishing fleet; promote a sustainable development of inland fishing; and foster the protection and enhancement of the environment and natural resources where related to the fisheries sector.

Under the EFF, each Member State is required to adopt a national strategic plan and submit it with the Operational Programme document. The Operational Programme (OP) is the single document drawn up by the Member State and approved by the Commission containing a set of 'Priority Axes' to be achieved with the aid of the EFF. Axis 1 is for measures for the adaptation for the Community fishing fleet; Axis 2 is for measures relating to aquaculture, inland fishing, processing and marketing of fishery and aquaculture products; Axis 3 is for measures of common interest (e.g. collective actions, protection and development of aquatic fauna and flora; fishing ports; development of new markets; etc); and Axis 4 is for measures for sustainable development of fisheries areas. Within these Axes are objectives and measures, some of which promote environmentally-friendly fisheries. For example, measures under Axis 1 might include objectives for improvement of selectivity, reducing the impact of fishing on non-commercial species, reducing the overall fishing capacity, and reducing the impact of fishing on ecosystems and the sea bottom.

Table 3: EFF breakdown by priority Axis for the 19 adopted Operational Programmes (Source DG MARE, June 2008).

Country	Priority axis funding (€, current prices)					
	Axis 1	**Axis 2**	**Axis 3**	**Axis 4**	**Axis 5**	**Grand Total**
Austria	-	5 164 318	50 000	-	45 000	**5 259 318**
Bulgaria	8 000 970	36 004 371	20 002 426	12 001 456	4 000 485	**80 009 708**
Cyprus	2 200 000	3 250 000	12 924 418	1 000 000	350 000	**19 724 418**
Czech Rep	-	11 926 937	13 824 404	-	1 355 334	**27 106 675**
Denmark	21 365 342	47 149 524	46 015 266	12 461 279	6 683 758	**133 675 169**
Estonia	15 264 531	24 583 929	21 209 664	19 281 513	4 228 402	**84 568 039**
Finland	3 445 000	16 990 000	14 783 827	3 606 000	624 000	**39 448 827**
France	59 621 494	63 029 212	85 049 416	5 699 644	2 653 318	**216 053 084**
Germany	8 145 000	57 560 225	68 687 844	19 438 000	2 034 348	**155 865 417**
Greece	77 272 459	59 689 538	32 320 240	33 300 000	5 250 000	**207 832 237**
Italy	161 250 284	106 085 713	106 085 713	16 973 714	33 947 430	**424 342 854**
Latvia	20 860 942	46 128 750	24 153 000	28 911 476	4 961 395	**125 015 563**
Lithuania	13 667 647	22 431 005	9 249 241	6 693 770	2 671 745	**54 713 408**
Netherlands	16 913 233	7 379 398	16 903 461	4 987 125	2 395 200	**48 578 417**
Portugal	53 065 134	78 058 495	90 026 920	17 403 406	7 931 294	**246 485 249**

[50] Council Regulation (EC) No 1198/2006.

Romania	9 975 000	105 000 000	30 000 000	75 000 000	10 739 207	**230 714 207**
Slovakia	-	10 467 810	2 536 292	-	684 426	**13 688 528**
Spain	403 067 965	344 241 335	316 510 945	49 336 048	18 734 619	**1 131 890 912**
Sweden	13 666 201	10 932 961	19 132 681	8 199 720	2 733 240	**54 664 803**
Grand Total	**887 781 202**	**1 056 073 521**	**929 465 758**	**314 293 151**	**112 023 201**	**3 299 636 833**

As information on funding was provided by EFF Axis rather than BAP Objective, it is not feasible to give exact figures on funds allocated to biodiversity and Natura 2000 purposes. In the 2007-2013 period the EFF may provide opportunities to support biodiversity conservation and sustainable use of natural resources. This can be done by the implementation of many different types of operations included in 4 of the 5 Priority Axes defined by regulation 1198/2006. However, in every OP these operations are grouped together with many other measures belonging to the same Axis and not linked to biodiversity and Natura 2000. The financial information provided by the EFF OPs does not include the amount allocated to measures or operations. The only available information concerns the total allocation of the EFF plus the national public contribution for each Priority Axis, and the total annual commitment of the EFF in the operational programme.

However, it appears that the majority of Member States (63%) have Operational Programmes that incorporate environmentally-friendly fisheries approved by the EC.

Target 3.5 Stock levels maintained or restored to levels that can produce maximum sustainable yield, where possible no later than 2015

Restoration programmes for diadromous species

Diadromous fishes are species that use both marine and freshwater habitats during their life cycle. These include certain species of salmon, trout, sturgeon, and eels. Because of their vast migration distances, conservation measures of these species need to cover both targeted fishing for the species and river management issues like dam construction and fish passes. Currently, 44% of Member States have a management plan for at least one diadromous species. A total of 19% did not have any management plans, although in the case of some countries there might not be any natural habitats for diadromous species. Austria, for example, does not have any diadromous species. Their trout restoration programme is for riverine trout species (*Salmo trutta fario*). Cyprus also does not have any management plans for diadromous species as they have no inland fisheries or river with constant water flow. The Iron Gate bars Great sturgeon to reach Hungarian rivers, so they do not have any management plans for diadromous species either. In the case of 37% of the Member States, it was unclear whether there were any management plans for diadromous species. The Czech Republic, for example, has an ongoing project for the reintroduction of Atlantic salmon (*Salmo salar*), but there is no data of an associated management plan.

A total of 33% of Member States have a management plan for salmon. This includes national obligations under regional management plans. The Baltic Sea Regional Advisory Council (BSRAC) recently published recommendations for a renewal of the Salmon Action Plan started by the IBSFC in 1997. Not all stocks are managed through regional cooperation. In Ireland, salmon are managed under advice from a National Salmon Commission and a

detailed system for the management of stocks is administered through the Wild Salmon and Sea Trout tagging scheme. In the case of 45% of the Member States it is unclear whether they have a management plan for salmon.

According to available information, only Finland and the United Kingdom appear to have management plans for diadromous species of trout. A total of 37% of Member States did not have management plans for trout and for the remaining 56% the situation is unclear.

Bulgaria, Germany and France all have management plans for sturgeon. A further 33% of Member States do not have any management plans for sturgeon and for the remaining 56% the situation is unclear. Romania, for example, banned sturgeon fishing for ten years starting from April 2006 and has forbidden trading of wild sturgeon caught in Romania. However, there is no information on whether they have a management plan for restoring sturgeon populations.

According to the EU regulation on eel protection[51] Member States are obliged to identify and define individual river basins (including maritime waters) within their national territory that constitute natural habitats for the European eel *(Anguilla anguilla)*, prepare Eel Management Plans for each eel river basin to reduce anthropogenic mortalities, with a view to bringing the eel population up to at least 40% of the size that is estimated to be there had there been no human influence. The Plan must also include an intended time scale to achieve this. Member States are exempt from preparing such a plan if they do not have any natural habitats for European eel. Eel Management Plans have to be submitted for approval to the European Commission no later than 31 December 2008 and have to be implemented by 1 July 2009. So far, only Belgium has adopted a Management Plan for eels. A total of 44% of Member States do not have an approved eel management plan, including Member States where it is under preparation (e.g. Sweden and Denmark) It is unclear whether the remaining 52% had any Eel Management Plans active or under development.

Other species of diadromous fish with management plans include houting (*Coregonus oxyrhynchus*) in Denmark and whitefish (*Coregonus sp.*) in Finland.

Common Fisheries Policy in the Maritime Policy

The Common Fisheries Policy (CFP) shall contribute to improve the balance between fishing capacity and available resources. The aim of the CFP is to secure the future of the EU fisheries sector by ensuring sustainable fisheries. Member States have agreed a series of multi-annual guidance programmes (MAGP), aimed at reducing the EU fishing fleet's capacity to levels more in line with the opportunities to catch fish. These programmes operate by setting targets for each Member State for their individual fishing fleets. The exact measures set out in the programmes for reductions in fleet capacity have become more and more complex with each programme and include targets related to total tonnage and engine power and for the reduction of fishing effort for individual specific fisheries as well. Quotas are set yearly for each fleet, on the species and sea region they are allowed to fish.

---

[51] Council Regulation (EC) No 1100/2007 on establishing measures for the recovery of the stock of European eel.

In 2004, when data were first available for all 27 Member States (excluding those without a coastline), total EU fishing capacity was 92054 vessels, falling by 5.7% to 86733 in 2006, and in terms of Tonnage, 2101108 tonnes in 2004 falling by 6.9% to 1955629 tonnes in 2006. The country with the greatest fishing capacity is Spain (in 1999, 2004 and 2006; 480209 tonnes in 2006) and Slovenia has the least (in 2004 and 2006 when it was 1070 tonnes). Thirteen (59%) countries have a decommissioning scheme in place (CY; DK; EE; EL; ES; FR; IT; LT; LV; NL; RO; SE; UK). For the remainder the status is either unknown (not verified for this study, BE; DE; MT; PT) or no commissioning scheme exists (BG; FI; IE; PL). Fishing capacity measured in terms of the number of vessels, tonnage (see Figure 15) and fishing power has fallen in all countries except Ireland. Although Ireland does not have a general decommissioning scheme in place, it has been reducing capacity in certain sectors, notably whitefish.

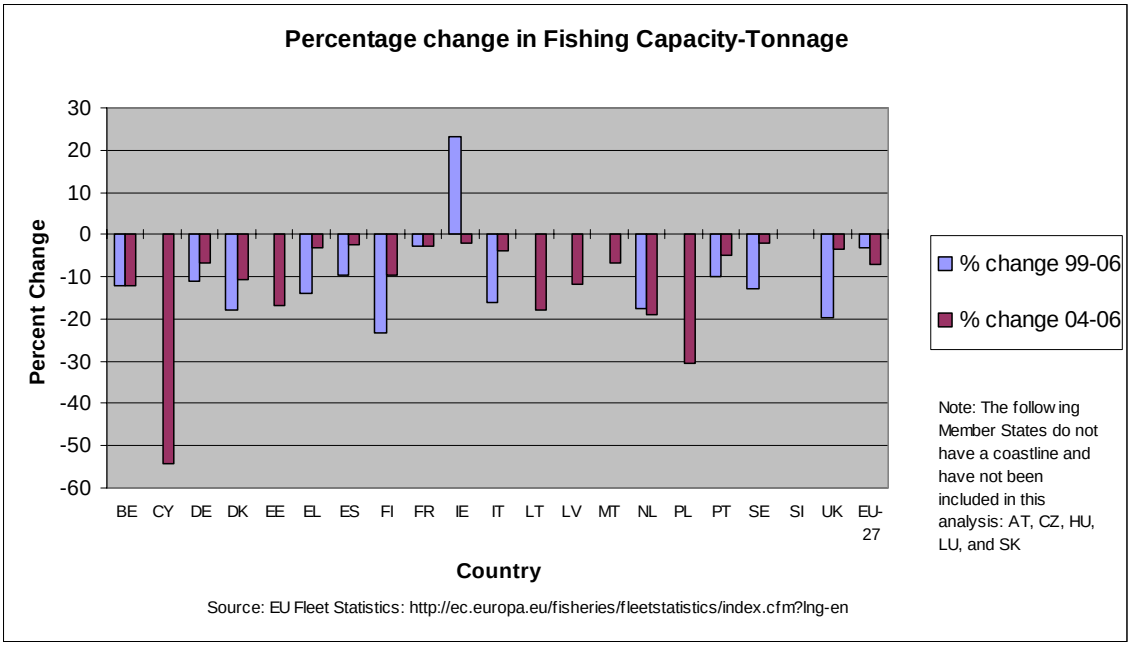


Figure 15: Changes in fishing capacity between 1999-2006 and 2004-2006 time scale.

The latest available information on fishing vessels decommissioned with public aid during 2006 and 2007 is given below.

Table 4

Fishing vessels decommissioned with public aid during 2006 and 2007
Source: Community Fishing Fleet Register 16 May 2008

	2006			2007		
MS	**Vessels**	**GT**	**kW**	**Vessels**	**GT**	**kW**
BE	9	2.224	6.038			
BG						
DK	40	4.513	12.582			
DE						

Fishing vessels decommissioned with public aid during 2006 and 2007
Source: Community Fishing Fleet Register 16 May 2008

	2006			2007		
MS	**Vessels**	**GT**	**kW**	**Vessels**	**GT**	**kW**
EE	17	1.779	4.691	12	937	2.245
IE	14	1.732	5.745			
EL	227	1.105	8.286	195	1.518	8.140
ES	132	13.686	32.860	73	2.759	9.993
FR	84	6.149	22.888			
IT	117	5.583	20.938	202	10.318	41.264
CY	5	200	1.209			
LV	28	1.205	2.781	17	950	2.228
LT				11	1.173	1.893
MT	3	90	679			
NL	1	29	118			
PL	84	2.469	9.118	24	741	2.565
PT	22	705	3.114	11	646	2.639
RO						
SI						
FI	2	264	789			
SE	3	242	1.145	17	472	2.429
UK						
Total	**788**	**41.974**	**132.980**	**562**	**19.513**	**73.396**

Technical workshops on Marine protected areas appropriateness as management tool for management of fisheries activities were carried out by the Commission and supported by Community experts. Measures are being introduced to protect sensitive habitats (e.g. deep sea coral reefs) and may result in no-take areas. A Council Regulation concerning management measures for the sustainable exploitation of fisheries in the Mediterranean has been adopted, chapter III of which includes fishing on protected areas.

EU has a list of vessels engaged in illegal, unreported and unregulated fisheries in the North East Atlantic[52]. A Communication on "a new strategy for the Community to prevent, deter and eliminate Illegal, Unreported and Unregulated fishing"[53], as well as a proposal for Council Regulation Establishing a Community system to prevent, deter and eliminate illegal,

[52] Commission Regulation (EC) No 1262/2006 of 23 August 2006, amending Council Regulation (EC) No 51/2006.

[53] COM(2007)601.

unreported and unregulated fishing[54] have been adopted by the Commission in October 2007. On 29 September 2008, the Council adopted the Regulation establishing a Community system to prevent, deter and eliminate IUU fishing. A stakeholder consultation has recently been launch on the reform of the CFP control system. The Commission has adopted on 14 November 2008 a proposal for a Council Regulation on the reform of the control system of the Common Fisheries Policy (CFP). It is designed to strengthen the current regulatory framework in order to ensure a level playing field and to develop a culture of compliance within the fisheries sector across the European Union (COM(2008) 721 final).

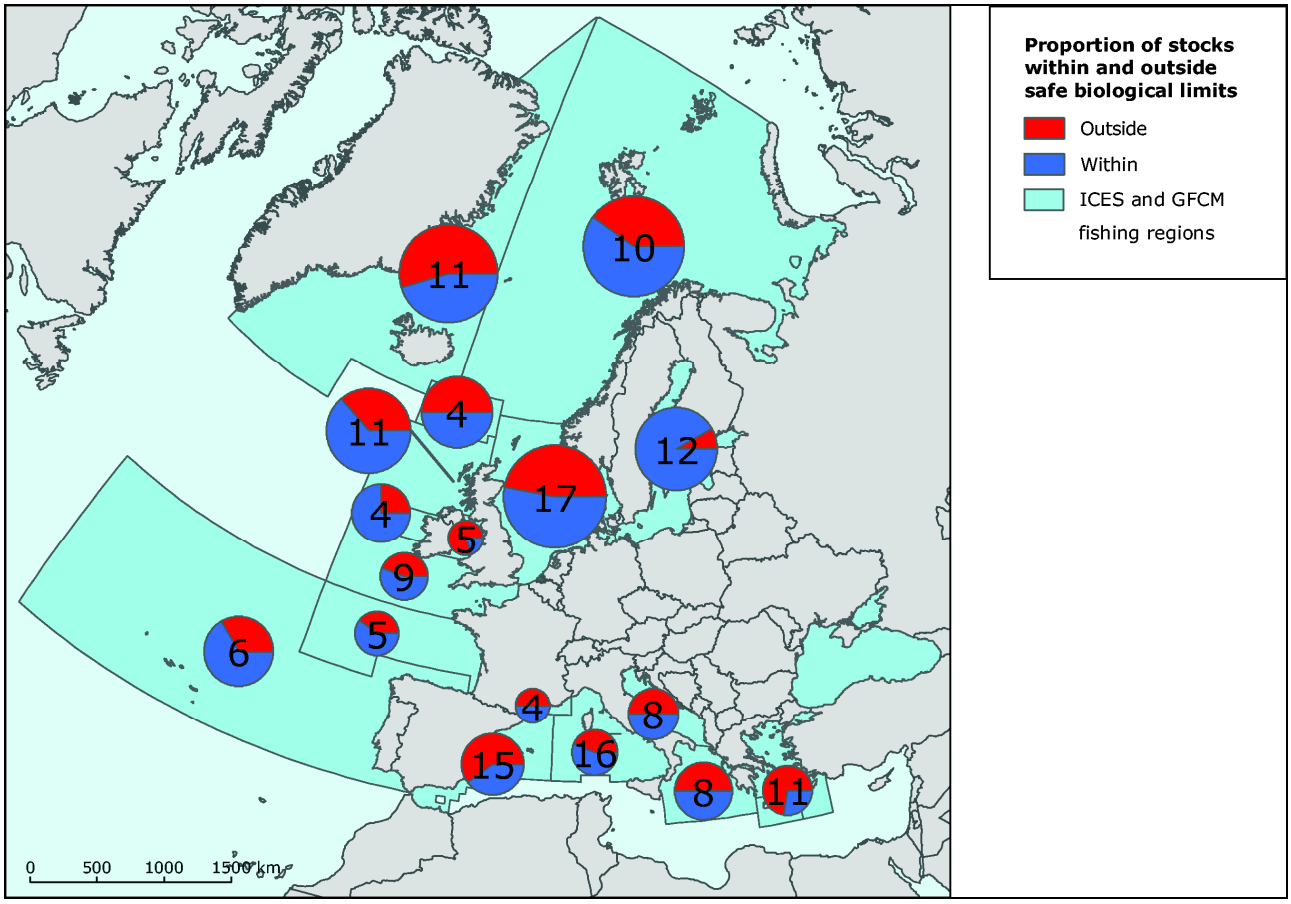


Figure 16: Status of the fish stocks in ICES and GFCM fishing regions of Europe in 2006[55]

Many commercial fish stocks in European waters remain to be assessed. In the NE Atlantic, the percentage (of catch in weight to the total catch) of un-assessed stocks range from a minimum of 3% (W. Scotland and West of Ireland) to a maximum of 34 % (Irish Sea and Iberian Peninsula). There is a general trend from North to South of an increase in percentage of un-assessed stocks. In the Mediterranean region, the percentage is higher ranging from 23% in the Adriatic Sea to 70% for tuna and tuna like species for the entire Mediterranean. In the Black Sea no stock is assessed.

54 COM(2007)602.

55 Note: The chart shows the proportion of assessed stocks which are overfished (red) and stocks within safe biological limits (blue). Number in circle is the number of stocks assessed within the given region. The size of the circles is scaled proportional to the magnitude of the regional catch. Data source: GFCM and ICES.

As shown on Figure 16, 8% (Baltic Sea) to 80 % (Irish Sea) are outside safe biological limits (SBL) of the assessed commercial stocks in the NE Atlantic. For the other areas in the NE Atlantic the percentages of stocks outside safe biological limits vary between 25% and 55%. In the Mediterranean the percentage of stocks outside SBL ranges from 44% to 73%, with the Aegean and the Cretan Sea being in the worst condition.

Target 3.6 Impact of fisheries on non-target species and habitats progressively and substantially reduced from 2006 onwards

Action plans and conservation status for marine species and habitats

A total of 86%of coastal Member States have action plans for marine species that are not the target of specific fisheries. These include cetaceans, seals, seabirds, fish, corals, turtles and molluscs. Some of the action plans are developed and adopted as obligatory measures under a regional or multi-national convention. For example, Contracting Parties to the Barcelona Convention (including: Cyprus, France, Greece, Italy, Malta, Slovenia and Spain) adopted several regional action plans in the context of the Mediterranean Action Plan concerning species such as monk seal, cetaceans, marine turtles, birds in Annex II of the SPA protocol and cartilaginous fishes. Other action plans are adopted as Member State national, rather than regional, initiatives. The UK, for example, has adopted action plans for a range of marine species — from the mollusc Native Oyster (*Ostrea edulis*) to grouped action plan for baleen whales — under their overall Biodiversity Action Plan.

Only Ireland has indicated that it has an action plan for non-target cetacean species under development. It is not clear whether the remaining 9% of coastal Member States have any action plans for non-target marine species.

Almost all of the Member States (95%) have monitoring programmes for non-target marine species. These monitoring programmes are undertaken in relation to national and regional initiatives. HELCOM, to which Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, and Sweden are parties, unanimously adopted Recommendation 27-28/2: Conservation of Seals in the Baltic Sea Area as well as Recommendation 17/2: Protection of Harbour Porpoises in the Baltic Sea Area. A requirement of both of these Recommendations is monitoring of populations and reporting on results of implementation.

Many Member States also have their own monitoring programmes, incorporating government bodies, research institutions and NGOs. Cyprus, for example, monitors and reports on both Green turtles (*Chelonia mydas*) and Loggerhead turtles (*Caretta caretta*) in a programme carried out by the Society for the Protection of Turtles and the local Department of Environmental Protection in conjunction with international research institutions.

Marine Habitats are also extensively monitored. 82% of coastal Member States have monitoring programmes for non-target marine habitats. It was not clear whether the remaining 18% of Member States do or not.

A Community Action Plan for Sharks was opened for consultation until 15 February 2008, an impact assessment of the Shark Action Plan is being undertaken with a view to its adoption by in early 2009. The Commission is gathering information and scientific advice with a view to completing a Community plan of action for reducing seabird by-catch in the context of FAO by the end of 2009.

Aquaculture planning and biodiversity

Priority Axis 2 of the European Fisheries Fund (EFF) relates to promoting production of environmentally friendly aquaculture. The OPs of 55% of Member States describe plans for aquaculture that take account of biodiversity and have been adopted (AT; BG; CY; CZ; DK; EE; EL; ES; FI; FR; IT; LT; LV; PT; RO) whilst a further 4% have a draft operational programme relating to biodiversity and aquaculture (UK).

The Simplified technical measures through the New Technical Measures Regulation proposed in 2008 aims to improve selectivity of fishing gear. A multi-annual recovery Plan for Bluefin tuna in the Eastern Atlantic and Mediterranean was adopted. In March 2007 the Commission adopted a Communication on reducing unwanted catches and eliminating discards in European fisheries[56], for which the European Parliament expressed broad support in its plenary session of 31 January 2008. The Communication proposes the adoption of a progressive fishery- by- fishery discard ban and the setting of standards for maximum acceptable by-catch. In this Communication the Commission announced to propose specific legislation as from 2008 and a sequence and plan for implementation. Legislation implementing fisheries restrictive areas to protect vulnerable deep-sea habitats in the Mediterranean and in the North East Atlantic is included in the 2008 TAC and Quota Regulation. Council Regulation 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fisheries in the Mediterranean includes prohibition of fishing with devices impacting sensitive habitats (e.g. sea grasses) in areas known to host such habitats.

Protection measures for four Irish SACs included as an amendment to 2008 TAC & QUOTA Regulation adopted in December 2007. DG ENV and DG MARE have completed a guidance document for Member States on how to request for fisheries management measures for marine N2000 sites under the CFP (http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf)

The Commission is responding to Member States requests regarding fisheries management measures for Natura 2000 sites. A new request from Spain for the marine Natura 2000 site 'El Cachucho' has been submitted.

Study and expert workshops have been carried out with STECF and ICES to identify improved indicators for reporting on impact of fishing on marine ecosystem (report released in July 2007). The Council adopted on 25 February 2008 the Regulation (EC) No 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy (CFP). This new framework also introduces provisions to meet new developments following the 2002 Reform of the CFP, in particular the move towards fisheries- or fleet-based management as opposed to managing individual stocks, the integration of environmental data, and the shift towards an ecosystem-based approach. The new Data Collection Regulation (DCR) includes the obligation for Member States to collect environmental data. The collection of basic scientific information will support periodic assessments of the progress of the CFP in integrating biodiversity protection requirements. The new DCR also includes access to and use of detailed data, in particular, access to satellite monitoring (VMS) data will provide detailed information at a high level of resolution required

[56] COM(2007)136.

for effective spatial planning. This will play a major role in enabling effective action to protect vulnerable marine habitats both under the Habitats Directive, and in fulfilment of the EU's international commitments. In August 2008 the Commission adopted technical implementing rules (COM 665/2008). In addition the Commission has recently proposed detailed implementing rules concerning the Commission's financial contribution to the Data Collection National programmes. A European Monitoring and Data Network for the Seas (EMODNET), to be established in the context of the new Integrated Maritime Policy, will monitor indicators on the natural state of the seas, including biodiversity.

Objective 4. To reinforce compatibility of regional and territorial 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

A. Context

Member States have the opportunity to support nature conservation and biodiversity through programmes integrated into their development strategies and co-financed from the Structural Funds (the European Regional Development Fund and European Social Fund) and the Cohesion Fund) with national co-finance. The nature directives[57] and the Environmental Impact Assessment (EIA) Directive[58] require the consideration of potential impacts of certain regional and territorial developments. This includes consideration of alternatives and the design of measures to prevent and reduce negative impacts. Careful assessments carried out early in the decision-making process have proven helpful. However, it is often done too late or is of poor quality. The recent introduction of strategic environmental assessments (SEA)[59], which apply to certain plans and programmes, should help better reconcile conservation and development needs by ensuring consideration of impacts much earlier in the planning process.

B. Progress assessment

REGIONAL POLICY, SPATIAL PLANNING

Target 4.1 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

Cohesion and structural funds contributing to nature conservation and biodiversity

In relation to EU Cohesion policy the Community Strategic Guidelines and the relevant fund regulations include clear references to the importance of nature protection in developing infrastructure and in relation to economic diversification. Moreover, the 2007-2013 programming period of the Cohesion Policy addresses directly the preservation of biodiversity. Under the European Regional Development Fund (ERDF) and Cohesion Fund (CF), each Member State is required to adopt a national development plan and submit it with the Operational Programmes referring to sectoral (horizontal) and regional programmes. The Operational Programme (OP) is the single document drawn up by the Member State and approved by European Commission. Based on the selection criteria developed for each

[57] Directive 79/409/EC, OJ L 103, 25.4.1979, p.1 and Directive 92/43/EEC, OJ L 206, 22.7.1992, p.7.
[58] Directive 85/337/EEC as amended by Directive 97/11/EC, OJ L 073, 14.3.1997, p.5.
[59] Directive 2001/42/EC, OJ L 197, 21.7.2001, p.30.

measure it is the Member States' responsibility to award projects except for Major Projects that have to be approved by the European Commission.

An initial assessment of the European Regional Development Fund and Cohesion Fund operational programmes for 2007-2013 reveals that Member States have made allocations to several categories of spending related to the protection of biodiversity and management of natural resources. The most relevant category is the "Promotion of biodiversity and nature protection" (cat. No. 51) for which EUR 2 719 million[60] has been allocated. Also highly relevant is the "protection of natural assets" (cat. No. 55) for which EUR 1 146 million is allocated. The "protection and development of natural heritage" (cat. No. 56) with a total of EUR 1 376 million, in the framework of tourism will also include some spending and thus indirect impact on nature and biodiversity.

All but three Member States have allocated some funding for nature and biodiversity protection, although as a proportion of the overall allocations this varies considerable between countries. As it is shown on Table 5, only five Member States intend to use more than 2% of their allocated funds for biodiversity related categories (cat. No. 51 and 55).

Country	Nature conservation in regional policy (million EUR) on categories No. 51+55	Nature conservation in regional policy (% of ERDF) on categories No. 51+55
Austria	0	0.00
Belgium	16	0.80
Bulgaria	99	1.50
Cyprus	0	0.00
Czech Republic	673	2.60
Denmark	6	1.20
Estonia	34	1.00
Finland	5	0.30
France	224	1.70
Germany	108	0.40
Greece	202	1.00
Hungary	289	1.20
Ireland	0	0.00
Italy	171	0.70
Latvia	26	0.60
Lithuania	166	2.50
Luxemburg	0	0.00
Malta	21	2.50
Netherlands	8	0.40
Poland	208	0.30
Portugal	167	0.80
Romania	236	1.20
Slovakia	30	0.30
Slovenia	90	2.20
Spain	750	2.20
Sweden	9	0.50
United Kingdom	29	0.30

Table 5: ERDF expenditure promoting nature conservation and biodiversity (cat. No. 51 and 55); Source: DG Environment, Unit Cohesion Policy and Environmental Impact Assessments

[60] Only EU contribution calculated, no national and/or private co-financing is included, state of July 2008.

According to the Operational Programmes (OP) of the Member Sates, the interventions planned cover a wide range of activities as for example:

– Preparation and implementation of Natura 2000 management plans; scientific studies, inventories, mapping;

– Training and institutional capacity building of the Natura 2000 bodies and protected areas management authorities;

– Protection of biological diversity both at the level of habitats and at the level of protection of endangered plant and animal species; improvements of the habitats of endangered species. Conservation of biological diversity. Keeping genetic diversity of flora and fauna;

– Restoration of animals' migration corridors;

– Improvement of abilities of the ecosystems and species to adapt to the increasing fragmentation of the landscape;

– Prevention of importation; regulation and liquidation of the populations of invasive plant and animal species;

– Forest-planting measures;

– Research on integrated management of invasive alien species;

– Reducing impact of infrastructure on species affected by fragmentation of space (infrastructures to overcome barriers on rivers and motorways, correction/adaptation of electric lines);

– Awareness- raising activities, information and education on nature protection and nature-friendly behaviour.

There are Member States, like the Czech Republic and Hungary primarily promoting the active, direct protection of natural assets thorough activities like habitat reconstruction, reduction of adverse impacts of infrastructural elements, etc. Others, like Bulgaria and Romania give more emphasise on the implementation of Natura 2000 network, or on the widening of knowledge-base and promoting the access to information on protected species just like Lithuania and Spain.

Biodiversity benefits can also be expected from measures in the urban context such as brown field rehabilitation, the re-establishment of green areas and open space, and, more directly, from landscape conservation measures where they accompany major infrastructure projects to compensate for biodiversity losses.

The operational programmes co-financed by ESF offer a wide range of other funding opportunities but they need to be identified and proactively by the interested parties at national levels. Many operational programmes contributing towards the achievement of the Convergence objective allow the use of the technical assistance to support measures that indirectly promote Natura 2000 or biodiversity activities. This is for instance the case in Germany, France, Italy, Bulgaria, Romania or Malta where technical assistance (either the OP on technical assistance or directly the technical assistance of the OP) allow funding activities in relation to the implementation of the environmental measures like environmental

monitoring, development of GIS, evaluation activities, reinforcement of capacity building and assistance to prepare Natura 2000 management plans.

Though there has been no agreement at Community level on specific biodiversity indicators as part of the core Structural Funds indicators adopted for the programming period 2007-2013, some Member States set adequate indicators in each of their OPs and this experience should be extended to other countries. This way information on changes in nature and biodiversity and effectiveness of the activities carried out will be provided by Member States financing such projects. There are cases of best practice projects that promote biodiversity protection in territorial planning but there are no available systematic overview of such actions yet. There is a need to build on the existing good practice cases demonstrating beneficial impacts for biodiversity from the Cohesion policy.

The effective use of the ESF funds for the purpose of nature and biodiversity protection as well as the amounts really used would need to be followed in the Annual Reports and to be discussed in the Natura 2000 ENEA working group.

Compared to the national programmes, the operational programmes contributing toward the achievement of the European Territorial Cooperation (ETC) objective (formerly INTERREG) includes a wide variety of cross-border cooperation actions within transnational partnerships. It appears to have higher allocations for specific action in favour of biodiversity and/or Natura 2000, representing on average 5.6% of the ETC 2007-2013 programmes budget. Approximately EUR 2 500 million is allocated on measures covering a wide variety of environment related activities a ca. EUR 500 million of which is for measures under category 51.

Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) of programmes and project that might have an impact on nature, biodiversity

Biodiversity considerations are also integrated into the regional development investments. Programmes and plans operated under the Cohesion policy have to undergo a mandatory Strategic Environmental Assessment (SEA) which is essential in helping avoid negative impacts on environment and biodiversity. Experience with application of SEA to Structural Funds for 2007-2013 is progressing. This will need to be evaluated to determine if specific guidelines are needed as regards its effectiveness for biodiversity protection. Two studies on the application of the SEA and EIA Directives have been launched in 2008 and will include examination of the relationship between these directives and the EU Biodiversity Action Plan and the Habitats Directive. The Final reports are expected in early 2009.

In general, the SEA of the regional programmes did not contain specific recommendations concerning biodiversity. In many of the major projects of OPs on transport or large infrastructures and other Trans-European Networks (TEN) projects were likely to cross Natura 2000 areas. In some cases (e.g. Czech Republic and Hungary) the SEA had identified possible negative impacts of concrete projects on NATURA 2000 sites and formulated recommendations to avoid or minimize them. The Authorities removed these projects from the list of possible projects of the OP. In a few OPs however, clauses conditioning the funding to the respect of nature protection legislation with the focus on Natura 2000 sites were introduced. This is the case in Poland (co-finance of projects having negative impact on the potential Natura 2000 sites shall not be eligible), Bulgaria (co-financing of projects having

negative impact on potential Natura 2000 sites will not be permitted) or Italy (management plans for Natura 2000 sites have to be in place before any co-financing is granted).

In line with the provisions laid down by the SEA Directive, the adaptation process of OPs included the participation of civil society. The Authority responsible for the certain programme was obliged either to take the comments expressed during the public consultation into consideration or to provide satisfactory explanation on the rejection of the proposal. In practice, even if the timeframe of the consultations were not always sufficient to allow a large public participation, the SEA process was proved to involve the majority of NGOs interested in the programme.

Evaluations of Major Projects for the period 2007-2013 will begin as soon as the projects will be submitted to the Commission (around mid -2008). EIA includes a description of the aspects of the environment likely to be significantly affected by the project, including fauna, flora, and landscape. The EIA provides also for an outline of the main alternatives studied by the developer and an indication of the main raisons for his choice, taking into account environmental effects. Environment Directorate-General of the European Commission will verify that the EIA takes duly into account impact on nature and biodiversity (including eco-systems) and the measures foreseen to avoid, minimise and compensate.

Target 4.2 Negative impacts of territorial plans (within each Member State) on biodiversity prevented or minimised and positive benefits optimised

As explained above, two studies on the application of the EIA and SEA Directives have been launched in 2008 and will include examination of the relationship between these directives and the EU Biodiversity Action Plan and the Habitats Directive. Final reports are expected in early 2009.

For more information on the progress please see text Objective 1, Target 1.1.

Target 4.3 Ecological coherence and functioning strengthened through spatial planning

A new initiative "Territorial Agenda for the European Union" has been adopted in May 2007, which provides background for planning and implementation of European ecological networks, especially stressing its role for opportunities for sustainable development in marginal areas and preservation of traditional cultural landscapes of Europe.

Target 4.4 Significant increase in proportion of tourism which is ecologically sustainable

The European Commission itself has no ready initiative or guidance document on ecologically sustainable tourism, but in 2006 it launched the pilot project **EDEN** "European Destinations of Excellence" which in 2008 focussed on protected areas. In addition, several (Member States have developed partnerships (see Table 6), and signed agreements or established labelling systems with stakeholders concerned with the tourism sector. The European Commission is aiming to establish a European Business and Biodiversity (B@B) Platform that may include the tourism sector.

Country	Finance	Tourism	Mining	Farming	SMEs	Other	Others
Austria							
Belgium							
Bulgaria							
Cyprus							
Czech Republic							state administrations, NGOs, professional associations
Denmark							Education
Estonia							
Finland							
France							Energy firms, Infrastructure firms and Commercial groups
Germany							Sports
Greece							
Hungary							
Ireland							
Italy							
Latvia							Municipalities
Lithuania							Public information company
Luxembourg							
Malta							
Netherlands							
Poland							
Portugal							
Romania							
Slovakia							
Slovenia							
Spain							
Sweden							
United Kingdom							

Table 6: Member States with national initiatives aimed at promoting partnership for biodiversity, by sector (See also Supporting Measure 3).
Source: Member States' country report, up to 20 June 2008

Target 4.5 All above outcomes achieved also in Outermost Regions

Allocations of regional funds in chapter Objective 4, Target A4.1. include expenditure for Outermost Regions as well.

For more information on the progress please see Objective 1, Target A1.5.

ENVIRONMENTAL POLICY

Target 4.6 All Strategic Environmental Assessments and Environmental Impact Assessments have taken full account of biodiversity concerns

For information on the progress please see text Objective 1, Target 1.1.

Objective 5. To substantially reduce the impact on EU biodiversity of invasive alien species and alien genotypes.

Headline target: Negative impacts on EU biodiversity of IAS and alien genotypes prevented or minimised from 2010 onwards

A. Context

Invasive alien species were identified in the 6th EAP as a priority for action. While support has been given to some localised eradication programmes via LIFE funding, the Community has still to develop a comprehensive strategy to address this issue. Work on this is currently ongoing, but there are still significant policy and legal gaps at national and Community level to tackle this rapidly evolving threat to biodiversity in Europe. At present overall efficiency of Community responses to deal with IAS is low and biodiversity-rich areas (e.g. EU overseas entities) do not receive appropriate attention. The multitude of existing EU legislation partially covering different aspects of IAS makes co-ordinated implementation difficult. Policy consistency between most Member States is low or non-existent. Scientific scenarios illustrate a dramatic increase in biological invasions (see also SEBI indicator number 10 annexed).

B. Progress assessment (Synthesis of EU-level actions)

Target 5.1 Impact of IAS on biodiversity in the EU and alien genotypes prevented or minimised from 2010 onwards

Strategies to reduce impacts from invasive alien species

Invasive alien species (IAS) are non-native species that are deliberately or unintentionally introduced by human action outside their natural habitats where they then establish, proliferate and spread in ways that cause damage to biological diversity, economy and human health. Overall IAS are currently considered to be the second most important threat to biodiversity at a global level. The main pathways for IAS introduction are associated directly or indirectly with trade. Rapid growth in trading and transport activities expand the opportunities for IAS introduction and environmental pressures such as rising CO_2 concentrations, warmer temperatures, greater nitrogen deposition, altered disturbances regimes and increased habitat fragmentation may facilitate further invasions.

The EU Biodiversity Action Plan includes a specific objective and several actions for IAS and alien species. Importantly, it encourages Member States to develop and national strategies on invasive alien species (by 2007) and to fully implement them by 2010. Table 7 sets out a summary of each Member States' progress with this action.

Table 7: Summary of Member States' progress with preparation of national strategies to reduce impacts from Invasive Alien Species (IAS)

♣: planned ♣♣: under development ♣♣♣: completed - : no details/not applicable

Member State	IAS Strategy	Action Plan	IAS addressed within Biodiversity Strategy	Other Policies/Strategies addressing IAS
Austria	-	♣♣♣	♣♣♣	-
Belgium	-	♣♣♣[1]	♣♣♣[1]	-
Bulgaria	-	-	-	-
Cyprus	-	♣♣♣[2]	-	-
Czech Republic	♣	-	♣♣♣	♣♣♣
Denmark	♣♣	-	-	-
Estonia	-	-	♣	-
Finland	♣♣	-	♣♣♣	-
France	-	♣	♣♣♣	♣♣
Germany	♣♣♣[3]	-	♣♣♣	-
Greece	-	-	-	-
Hungary	♣	-	♣♣♣	♣♣♣
Ireland	♣♣♣	-	-	-
Italy	-	-	-	-
Latvia	-	-	-	♣
Lithuania	-	♣♣♣	♣♣♣	-
Luxembourg	♣	-	-	-
Malta	♣	-	-	-
Netherlands	♣♣♣	-	-	-
Poland	♣	-	-	-
Portugal	-	-	♣♣♣	-
Romania	-	-	-	-
Slovakia	-	-	♣♣♣	-
Slovenia	-	♣♣	-	-
Spain	♣	♣♣♣	-	-
Sweden	♣♣	-	-	-
United Kingdom	♣♣♣	-	-	-

Notes: The Action Plan column indicates countries that stated in the Member States questionnaire that an Action Plan had been developed. 1) Belgium has produced regional Action Plans and included targets regarding invasive alien species in its federal biodiversity strategy. 2) An Action Plan addressing invasive alien species in the Mediterranean sea has been developed. 3) Subnational IAS strategies have been implemented by Germany.
Source: Member States questionnaires; Miller, C., Kettunen, M. & Shine, C. 2006. Scope options for EU action on invasive alien species (IAS). Report to the European Commission, Institute for European Environmental Policy, Brussels.

Out of the 27 states, only three are known to have to have currently completed an IAS strategy at a national or federal level (i.e. the United Kingdom, the Netherlands and Ireland), whilst Germany has developed subnational strategies. A further three countries (Denmark, Finland and Sweden) are currently working on the development of national strategies, and six are planning to do so. Four countries indicated that they have completed action plans rather than strategies (although the plan for Cyprus only covers marine species).

This leaves 14 countries that have not or are not producing strategies or plans (or have not provided information on their progress). However, several countries have at least included objectives addressing IAS in their national biodiversity strategy. Austria, Lithuania, Spain,

Belgium (at the regional level) and Cyprus (for the Mediterranean sea) have completed action plans focusing on IAS.

Existing EU legislation and policy already provides part of the solution to the problems linked invasive species. However, at present there are no mechanisms to support harmonisation or consistency of approaches between neighbouring countries or countries in the same sub-region. There are no formal requirements for risk analysis for intentional introduction of non-native species that may affect biodiversity and accidental and negligent introductions remain largely unregulated both Member State and Community level. No unified system exists to monitor and control IAS and their effects on European biodiversity. This means that actions undertaken by one Member States may be negated by the non-action of the neighbouring countries.

Work is ongoing to develop an EU Framework in Invasive Species in 2 steps. The first step is a Communication "Towards an EU Strategy on Invasive Species" foreseen to be adopted in December 2008. This Communication identifies policy options to tackle IS. An ongoing study for the Commission assessing environmental, economic, and social impacts of IAS, assists with the development of this policy. A Council Regulation dealing specifically with alien species in aquaculture was agreed on 11 June 2007[61] and a new permit system will enter into force for this sector no later than 1 January 2009.

Early warning system

An effective early warning and information system (EWIS) is an integral part of the policy options suggested in the upcoming Commission Communication.

The EEA has commissioned a feasibility study on an European wide Early Warning and Information System (EWIS). Such a system would be based on existing activities including the Alien Species Inventory for Europe delivered by DAISIE see http://www.europe-aliens.org/index.jsp; NOBANIS (North European and Baltic Network on IAS; scientific online journals including "Aquatic Invasions" and "Biorisk".

Target 5.2 Impact of alien genotypes on biodiversity in the EU significantly reduced by 2010 [and again by 2013]

Biosafety measures to reduce impacts from alien genotypes

All Member States have ratified the Cartagena Protocol on Biosafety, and have adopted/ implemented relevant Community Regulations and Directives referring to genetically modified organisms (GMOs), though to varying degrees. This includes Regulation 1946/2003 on transboundary movements[62], which transposes the provisions of the Protocol into Community law. In addition, some Member States have implemented stricter provisions than the Community law requires. Only a limited number of Member States (e.g. Italy, Denmark or Czech Republic) have adopted relevant legislation on the coexistence of genetically modified

61 Council Regulation 708/2007.

62 Council Regulation 1946/2003 http://eur-lex.europa.eu.

crops with conventional and organic farming. However, the majority are already in the process of developing related provisions.

Data Sources:

A5.1.2

Member States questionnaires

Miller, C., Kettunen, M. & Shine, C. 2006. *Scope options for EU action on invasive alien species* (IAS) Final report for the European Commission. Institute for European Environmental Policy (IEEP), Brussels, Belgium.

DG Environment website on IAS, http://ec.europa.eu/environment/nature/invasivealien/index_en.htm

Hulme E., 2007. *Biological invasions in Europe: drivers, pressures, states, impacts and responses*. Issues in Environmental Science and Technology No 25. Biodiversity under Threat. The Royal Society of Chemistry, Cambridge, UK

POLICY AREA 2: The EU and global biodiversity

Objective 6. To substantially strengthen effectiveness of international governance for biodiversity and ecosystem services.

A. Context

The EU is committed to achieve the target agreed by the Convention on Biological Diversity (CBD) and the World Summit on sustainable Development 'to significantly reduce the rate of biodiversity loss by 2010'. The key international agreement to promote progress towards this target is the CBD. The EU plays an active role in international biodiversity governance. Implementation of the CBD needs to be substantially reinforced. The EU also actively implements a range of other biodiversity–related international agreements such as the Bonn Convention on Migratory Species, the Ramsar Convention on Wetlands and the Convention on International Trade in Endangered Species n (CITES, see objective 8), and promotes synergies between these.

B. Progress assessment

Target 6.1 International governance for biodiversity substantially more effective in delivering positive biodiversity outcomes by 2010

Implementation of the CBD at the EU level

All EU Member States and the European Community are a Party to the CBD and are implementing the CBD and related MEAs in their countries through a wide range of policies and measures.

Nearly all Member States (24) have prepared National Biodiversity Strategy and Action Plans (NBSAP) as required by the CBD. The 2002 Communication and EC Biodiversity Action Plan subject to this report can be considered as the revised NBSAP for the EC. Detailed information on activities undertaken to implement the CBD can be found in the National Reports to the CBD. The EC and most Member States (23) have submitted their third national reports as well as a number of thematic reports to the CBD.

From the information received by the Member States, it is impossible to asses the level of direct financial contributions to national biodiversity conservation activities (as a percentage of GDP). The available information shows that substantial funding for national biodiversity in the EU is released through a range of European, national and subnational programmes, ranging from dedicated nature protection schemes to rural development measures. It is not possible to state whether financial support has increased since adoption of the EC-BAP.

Implementation of the CBD at the regional and global level.

Since the adoption of the BAP, the EU has continued to promote implementation of the UN Convention on Biological Diversity (CBD) and to strengthen its effectiveness. These efforts culminated at the Ninth Conference of the Parties to the CBD (COP9) which took place in Bonn, Germany in May 2008. COP9 adopted a number of landmark decisions that greatly advance global biodiversity politics on a range of critical issues and thereby help achieve the global target of substantially reducing current rates of biodiversity loss by 2010. These decisions are largely in line with the EU objectives outlined in Conclusions of the EU Environment Council adopted in June 2007 and March 2008. Implementation of important CBD Programmes of work such as on forest biodiversity and protected areas was strengthened. COP9 also reached an agreement on biofuels, which, for the first time at global level, establishes that the production and use of biofuels should be sustainable in relation to biodiversity. A major step forward has been taken to reach the target of establishing a global network of marine protected areas by 2012. The Conference adopted scientific criteria for the identification of marine areas in need of protection. Importantly the Conference also agreed that, in support of the United Nations General Assembly, work will be done to identify marine areas that meet the criteria and to provide guidance for the assessment of environmental impacts of activities undertaken in the high seas. On biodiversity and climate change governments agreed on a process which will feed biodiversity concerns into the ongoing climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). The Conference also adopted a decision severely limiting any activity with regard to ocean fertilization. Major progress was reached in the ongoing negotiations of an international regime on access to genetic resources and the fair and equitable sharing of benefits arising from their use (ABS). COP9 adopted a detailed roadmap for finalising this negotiation by the tenth Conference of the Parties in 2010. Another breakthrough concerns the development of an international science-policy platform on biodiversity, ecosystem services and human well-being which should be in place by 2010. Implementation of these decisions will require continued political attention and efforts.

Another indicator demonstrating the EU's commitment to support implementation of the CBD are the level of financial contribution to the biodiversity-related Conventions as well as the level of biodiversity-related bilateral and multilateral aid. For this last element, see objective 7.

The European Community and Member States have provided significant financial contributions to both the core and voluntary budgets of the CBD, its Cartagena Protocol on Biosafety and other biodiversity-related Multilateral Environmental Agreements as well as to non-governmental and other international organisations supporting implementation of the CBD and achievement of the 2010 target. For example, the 28 CBD Parties from the EU collectively provided in 2007 around 54% of the contributions to the trust funds of the CBD in 2007 of the CBD (191 Parties).

Contributions to CBD core (pledges) and voluntary trust funds (contributions) 2007 (in USD)								
	Contributions per trust fund (*)							Total
Member State	BY	BG	BE	BI	BZ	VB	BH	
AT	90514	30037						120551
BE	112643	37380						150023
BG	1791	594						2385
CY	4110							
CZ	19283	6399						25682
DK	75657	25107			31694			132458
EE	1264	420						1684
FI	55163	18638		10702	33844			118347
FR	635392	210855						846247
DE	912731	302889			51000			1266620
EL	55847	18533						74380
HR	13277	4406						17683
IE	36880	12239			67250			116369
IT	514742	170817	3000					688559
LV	1581	525						2106
LT	2529	839						3368
LU	8114	2693						10807
MT	1475	371						1846
NL	175078	59095					38400	272573
PL	48576	13120						61696
PT	49525	16435						65960
RO	6322	2098						8420
SK	5374	1783						7157
SI	8640	2867						11507
ES	265537	88118	1236598	128610	226978	306747		2252588
SE	105161	34898			28843			168902
UK	645613	214264	144217		70690			1074784
EC	204018	54877	247164	91222	72977	22806	18244	711308
Total EU	**4056837**	**1330297**	**1630979**	**230534**	**583276**	**329553**	**56644**	**8218120**
Total Budget	9012377	2373107	1978915	307764	788722	375647	290532	15127064
%EU	45	56	82	75	74	88	19	54

Table 8: Contributions to CBD core (pledges) and voluntary trust funds (contributions) 2007 (in USD)

Source: CBD Secretariat 2007, Document UNEP/CBD/COP/Bur/2008/1/4: Report on Activities of the Secretariat on the implementation of the work programme of the convention and its protocol

(*) BY: General Trust Fund to the Convention on Biological Diversity (CBD)
BG: General Trust Fund to the Cartagena Protocol
BE: General Trust Fund for additional voluntary contributions in support of activities under the CBD
BZ: General Trust Fund for additional voluntary contributions to facilitate the participation of parties in the process of the CBD
BH: Special Voluntary Trust Fund for additional voluntary contributions in support of approved activities under the Cartagena Protocol
BI: Special Voluntary Trust Fund for additional voluntary contributions to facilitate the participation of parties in the process of the Cartagena Protocol
VB: General trust Fund for voluntary contributions to facilitate the participation of indigenous and local communities in the work of the CBD

They also provided substantial contributions to Secretariats of the other biodiversity-related conventions (Ramsar, CMS, AEWA, World Heritage Convention), which they are party to, as well as to the UNEP Environment Fund. All Member States contributed a total of

CHF 1 258 867.00 in 2007 and CHF 1 508 384.00 in 2008 to the Ramsar secretariat. Twenty-six Member States and the EC are parties to the Convention on Migratory Species (CMS) and contributed a total of EUR 1 354 240.00 to the CMS secretariat in 2007. Twenty-one Member States and the EC are parties to the African-Eurasian Waterbird Agreement (AEWA) and in 2006 they contributed a total of EUR 528 779.00 to the Secretariat. All Member States are parties to the World Heritage Convention and they contributed a total amount of USD 1 128 951.00 to the World Heritage Fund in 2006. Member States also provide substantial contributions to the UNEP Environment Fund. In 2007, they made a total contribution of USD 49 053 442.00 to fund the UNEP Programme of Work.

Enhance integration of Biodiversity into global processes

The 2010 target has been included in the Millennium Development Goals.

Biodiversity has also made it on top of the G8 agenda. In 2007, G8 Environment Ministers launched the so-called Potsdam Initiative which contains specific actions to achieve the 2010 biodiversity target. These were reinforced and further developed at the G8 Environment Ministers meeting in Kobe, Japan in May 2008, which adopted the 'Kobe Call for Action for Biodiversity'. At the G8 Summit in Heiligendamm Heads of States and Governments acknowledged the Potsdam Initiative and committed to enhancing their efforts for the conservation and sustainable use of biodiversity.

The EU promotes maximising co-benefits between biodiversity and climate change mitigation and adaptation measures in negotiations of both UN-FCCC and the CBD.

Promote improved Oceans Governance

On top of efforts in the CBD (see above), the EU continues to promote initiatives to strengthen international action in the UN, Regional Fisheries Management Organisations (RFMOs) and relevant international conventions to protect vulnerable marine habitats. It actively participated in the UNCLOS process that led to the adoption in December 2006 of Resolution 61/105 of the UN General Assembly on Sustainable Fisheries, for the protection of vulnerable deep-sea ecosystems in the high seas. Little progress has been made in efforts to negotiate international rules under the UN General Assembly (UNGA) to guide and facilitate the establishment of marine protected areas in areas beyond national jurisdiction. Nevertheless, in June 2008, the Council reached political agreement on two draft regulations presented by the Commission in October 2007. One regulation is to protect fragile deep-water ecosystems from bottom trawling in the high seas, in line with recommendations issued by the UNGA. The EU will continue to promote initiatives to strengthen international action in the UN, Regional Fisheries Management Organisations (RFMOs) and relevant international conventions to protect vulnerable marine habitats. The second regulation aims at improving the fight against Illegal, Unreported and Unregulated (IUU) fishing. The measures will only allow access to the EU market of fisheries products that have been certified as legal by the flag state or the exporting state concerned. A European black list of vessels and states will be set up as will deterrent sanctions against IUU fishing in EU waters and against EU operators engaged in IUU fishing anywhere in the world. The Council also approved a new regulation on fishing authorisations for EU vessels fishing outside EU waters, which will ensure the EU has a single coherent framework for dealing with all EU vessels which operate away from home, whether under Fisheries Partnership Agreements, in waters managed by Regional

Fisheries Organisations, or under private agreements with third countries.

Objective 7. To substantially strengthen support for biodiversity and ecosystem services in EU external assistance.

A. Context

The enhanced funding earmarked for biodiversity and the strengthening of measures to mainstream biodiversity in development assistance has been included in the new European Consensus on Development Cooperation. Nature conservation is specifically mentioned as an area that can be supported by the European Neighbourhood and Partnership Instrument (ENPI)[63]. The Commission's Communication on Policy Coherence for Development[64] specifies: "The EU should enhance funding earmarked for biodiversity and strengthen measures to mainstream biodiversity in development assistance." This ambition is carried forward in the new EU Development Policy[65] (the European Consensus on Development Cooperation).

The EU Council of both Environment and Development Cooperation Ministers welcomed the "Message from Paris - Integrating biodiversity into European development cooperation" adopted at a Conference on Biodiversity in European Development Cooperation. Member States are important donors to biodiversity including the Global Environment Facility which supports biodiversity projects. The Biodiversity Action Plan aims at enhancing earmarked development cooperation funds for biodiversity as well as better mainstreaming of biodiversity into Community and Member States' development aid budgets. This remains a major challenge largely due to the low priority often given to biodiversity by partner countries in the face of other compelling needs.

B. Progress assessment

Target 7.1 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]

Adequate funds earmarked for biodiversity in European Community projects and programmes in developing countries (A7.1.1 & 7.1.2 & 7.1.5)

In 2007, the European Commission's Directorate General for Development carried out a data collection exercise on all environmental projects funded in the context of development cooperation from 2000-2006. Preliminary results demonstrate that for all geographical regions combined disbursements for biodiversity in this period amounted to about EUR 50 million/year with considerable annual fluctuations. Both commitments and disbursements tended to be concentrated in certain years as they were linked to a certain extent to the different programming cycles. A trend analysis at this stage would therefore not provide a

63 REGULATION (EC) No 1638/2006.
64 COM (2005) 134 final.
65 COM (2005) 311 final.

reliable insight. This figure includes all 286 projects which have been marked as being relevant for biodiversity. These data include projects funded from the Environment and tropical forests budget line as well as projects funded from the geographical instruments. As for commitments during the period 2002-2006, a recent exercise laid by The European Commission's EuropeAid co-operation office shows similar figures, with an average commitment per year of EUR 107 million for biodiversity and forests issues (thematic and geographic instruments together).

Thematic instruments

A total of EUR 30.6 million has been allocated to biodiversity for the four years period 2007-2010 under the EC Thematic Programme for Environment and Natural Resources (ENRTP). Furthermore, some other headings of ENRTP are strongly linked to biodiversity. A total of EUR 72 million is earmarked for the promotion of Sustainable Forest Management (additionally, EUR 34 million is available for implementation of the initiative on Forest Law Enforcement, Governance and Trade (FLEGT)). EUR 6.4 million is earmarked for fisheries & marine/coastal resources. EUR 12,3 million is earmarked for climate change and biodiversity projects for countries covered by the European Neighbourhood and Partnership Instrument (ENPI). In total, approximately EUR 150 millions will be available for biodiversity related matters under 2007-2010 ENRTP. This represents an annual average of EUR 37.5 millions.

During the former period (2000-2006) the amount allocated for biodiversity and forests projects under the Thematic budget lines (Environment, Tropical Forest etc.) was approximately the same, with a total of approximately 265 M€ on seven years, representing an annual average of EUR 37.3 million. The Life 3rd Countries programme added approximately EUR 8.5 millions to external actions in biodiversity during this period. The yearly amount allocated for biodiversity & forests therefore reached EUR 38.5 millions on average.

As for the thematic instruments for environment, the conclusion is that the global increase in budget (from EUR 323 million for 7 years (2000-2006) to EUR 470 million for 4 years (2007-2010)) has not benefited to biodiversity, for which the allocation remains stable in absolute terms. The inclusion of new themes and sectors in the thematic programme (energy, climate change adaptation) explains this stability.

Geographical instruments

During the former period (2002-2006), programmes whose main objective is biodiversity management and conservation (support to protected areas, forest management etc.) were allocated approximately EUR 276 millions (EUR 55 millions yearly). This figure reaches EUR 382 millions taking into account programmes for which biodiversity is a significant objective (EUR 76.5 million yearly).

The European Development Found financed the biggest share of projects directly related to biodiversity, with about EUR 25 millions yearly. Most important programmes in that region concerned Central African forests/savannas (ECOFAC Programme, EUR 38.5 millions; CURESS in Chad, EUR 7 millions; DRC projects EUR 8.7 millions), Indian Ocean coastal zones (EUR 18 millions); Monitoring of illegal killing of elephants (pan-African, EUR 10 millions). Two programmes in OCTs accounted for about EUR 9 millions.

In Asia, main programmes concerned China (EUR 30 millions), Indonesia (15 millions,

FLEGT), and support to the ASEAN centre for biodiversity (EUR 6 millions).

In Central America, the Honduras & Ecuador programmes on forest (EUR 59 millions and EUR 17 millions respectively) were the most important projects. In the Neighbourhood, two projects focused mainly on biodiversity, accounting for about EUR 3 millions.

For the 2007-2010 period, the actual previsions shows that more than EUR 220 millions would be allocated to programmes with a focus on biodiversity (EUR 55 millions yearly). Central African region, Ethiopia and Malawi in Africa, Honduras, Bolivia and Brazil in Latin America represent the main areas on which the EC would intervene in the coming years.

For 2007 & 2008, first years of the programming exercise following the Communication, the committed amounts for projects whose main objective is biodiversity were respectively EUR 9.6 million (25.8 millions including FLEGT support projects) and EUR 44.5 millions (51.5 including FLEGT support projects). For these two years, EUR 121 millions have also been committed for projects with components or significant objective on biodiversity – which is a sign of a better integration of this issue in other sectors.

The first estimates indicate that funding for specific biodiversity, protected areas & forest management projects under the EDF will increase in real terms in the ACP countries between the 2002-2006 and 2007-2010 periods (from EUR 25 millions yearly to EUR 36 millions). This increase will concern mainly Africa, while commitments are expected to decrease in the Caribbean and Pacific regions. Several rural development programmes in ACP countries also propose to include a biodiversity component. At least 20 countries have identified biodiversity or natural resources management in one or the other sectors of their national strategies. The 10th EDF intra-ACP program (global allocation) has allocated EUR 20 millions for biodiversity.

However, the global increase under EDF should be put in perspective, as the annual EDF allocation has been approximately doubled between 9th & 10th EDF.

In Latin America, a slight increase is foreseen in real terms (from EUR 16.5 millions yearly to 18.75), as two countries, Bolivia and Honduras would benefit from an important support in forest/river basin management (respectively EUR 69 & 28 millions). EUR 18 millions have also been allocated to natural resources management in Brazil.

In Asia, on the contrary, a significant decrease is expected – mainly due to the fact that the former period included an important commitment (EUR 30 millions) in China. Other environment programmes nevertheless exist, with potential positive impacts on biodiversity preservation, such as the 'Rural development and natural resource management' programme in Pakistan, or the SWITCH-Asia programme on sustainable production and consumption. In Bangladesh EUR 7.5 millions have been allocated to integrated natural resources management in Sundarbans. Environment is also included in the India, China, Bangladesh, Bhutan and Central Asia Strategy Papers, thus not focusing specifically on biodiversity.

In the Neighbourhood countries, there is so far not enough visibility to know the trends as regards biodiversity – even if the potential exists as important funds have been reserved for environment issues in that region.

It has to be underlined that the allocation of funds to biodiversity in Strategy Papers/Indicative Programmes is still hampered by several obstacles – as explained under part relative to target

7.2.

For the programming cycle of 2007-2010 for ENPI (European Neighbourhood and Partnership Instrument) and of 2007-2010 for DCI (Development Cooperation Instrument) and the European Development Fund (EDF), which took place after the adoption of the EU Action Plan, the first estimates realised by the Commission indicate that funding for specific biodiversity or protected areas projects will slightly increase in real terms in the ACP region, but decrease in Asia.

As a conclusion, Funds allocated to biodiversity will remain at the same level in real terms within the Thematic Instrument. On Geographical instruments (EDF, DCI, ENPI), expected trends show so far a stability in real terms, with regional variation as a slight increase is expected in Africa and Latin America, and a decrease in Asia. Nevertheless figures for 2007-2010 period are still provisional at that stage, as some strategy papers are still in preparation and the identification of projects and activities is still on-going. Following the on-coming mid-term review of strategy papers, some modifications of funding for biodiversity might also occur.

Adequate funds earmarked for biodiversity in Member States projects and programmes in developing countries including through a substantial 4th GEF replenishment. (A. 7.1.2 and 7.1.4)

The EU and its Member States are major donors in the fields of biodiversity. However, very few Member States have dedicated funds allowing a specific earmarking for biodiversity. Exceptions include for example the UK's Darwin Initiative, or Sweden's international programme for biodiversity, the Swedish International Biodiversity Programme SwedBio. The following graph has been produced using figures from the 2008 OECD publication 'Statistics on biodiversity-related Aid'. Biodiversity-related aid is defined as activities that promote at least one of the three objectives of the Convention on Biological Diversity: the conservation of biodiversity, sustainable use of its components (ecosystems, species or genetic resources), or fair and equitable sharing of the benefits of the utilisation of genetic resources. Biodiversity spending data are derived from the Creditor Reporting System database Organisation for Economic Cooperation and Development (OECD) where members of the Development Assistance Committee (DAC) and multilateral donors, a forum of major bilateral donors, report their aid activities[66]. Data for this assessment are available for EU15 countries only. The figures are only capturing bilateral aid, aid to GEF, UNEP and other multilateral organisations is not included. The figures represent the yearly funds in million Euros as an average of the assessed 4 year period.

[66] Available online at www.oecd.org/dac/stats/crs.

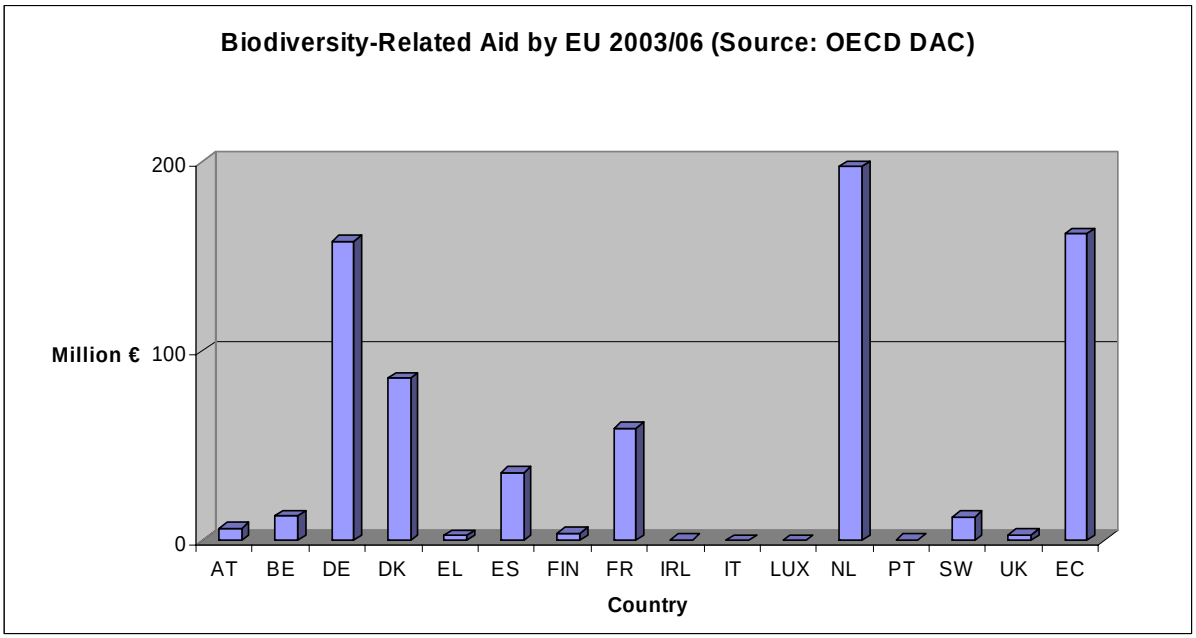


Figure 17: Biodiversity-Related Aid by EU 2003/06[67]

Yearly external assistance for biodiversity from the EU totalled around EUR 1500 million during 2003-2006, representing 48% of the total biodiversity-related aid of all OECD DAC members[68].

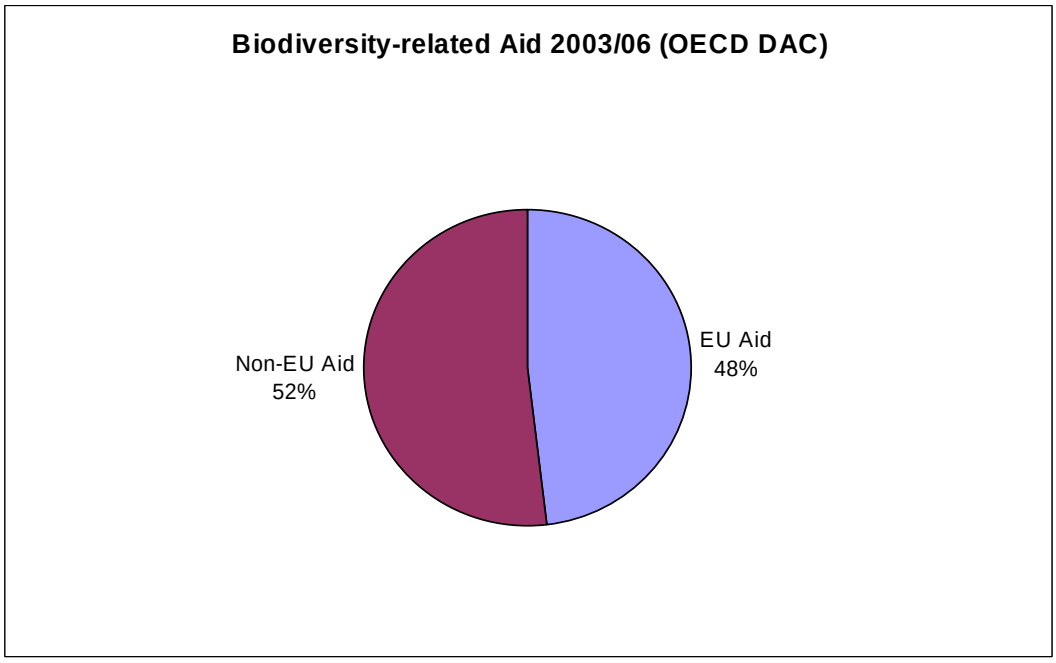


Figure 18: Biodiversity-Related Aid 2003/06

These funds amount to around 1/50th of Community and Member States' total annual

67 Counted on 1.56 USD/EUR changing rate.

68 Data from OECD-DAC 'Statistics on biodiversity related aid. See http://www.oecd.org/dataoecd/26/24/40756129.pdf

development aid budgets which indicates that biodiversity-related funding has increased since adoption of the Biodiversity Action Plan.

Member States are also important donors to the Global Environment Facility.

EU Member States strongly advocated a substantial replenishment of GEF. At the conclusion of the negotiations for the fourth replenishment of the GEF Trust Fund in June 2006, 31 donor countries agreed to replenish the Trust Fund with 3.13 billion dollars for the four year period 2007-2010. According to the latest report of GEF to the CBD (document UNEP/CBD/COP/9/9 of 2 May 2008), from 1/1/2006 to 31/12/2007, GEF approved 54 full-size, 19 medium-size projects, and two enabling activities in the area of biological diversity (including biosafety). The total GEF allocation during this period was approximately $ 306 million. An additional $1536 million was leveraged in co-financing for the projects from partners that included the GEF Agencies, bilateral agencies, recipient countries, and the private sector. In addition to the biodiversity portfolio, fourteen multi-focal area projects were partially supported with $ 42 million of biodiversity resources. In addition, 23 project preparation grants were approved in the reporting period amounting to approximately $4.3 million.

Enhanced earmarked and mainstreamed development assistance funds available for biodiversity in Overseas countries and territories

As regards the EC, the programming for OCTs is under way. A Country Environmental Profile has been prepared which identified the importance of biodiversity in these countries and territories.

In France, following the 'Grenelle de l'Environnement' meetings, the French Government launched a specific biodiversity programme dealing with overseas regions. In the Netherlands, a specific support related to biodiversity is provided to the Dutch Caribbean Nature Alliance through the new multi-year programme for the Netherlands Antilles launched in 2002.

The Commission and several EU Member States participated in, and actively contributed to, the European Conference on Biodiversity and Climate Change in Outermost Regions held in La Réunion on 7-11 July 2008. This conference brought together for the first time representatives of all OR and OCTs and stressed inter alia the need for earmarked additional funding for biodiversity conservation as currently the available funds for environmental protection are still considered not sufficiently allocated to biodiversity.

Target 7.2 EU 'mainstream' external development assistance delivering enhanced biodiversity and related livelihoods benefits, and negative impacts on biodiversity prevented or minimised, from 2006 onwards.

Mainstream biodiversity into bilateral development cooperation programmes through the preparation and implementation of Country and Regional Environmental Profiles

Significant progress in mainstreaming environment and biodiversity concerns in EC development cooperation strategies has been made over the last few years, however there is a need to make further progress particularly to ensure that commitments and recommendations are coherently translated into action. **Environmental Profiles** have been established for most

countries (CEP) and regions (REP) covered under EC external cooperation, as a way to inform the elaboration of response strategies having due regard of the environmental dimension along side with political and socio-economic considerations. This is a clear progress with respect to the previous EC programming exercise where only a few country strategies relied on environmental profiles to underpin the country analysis. In preparing CEPs and REPs systematic attention has been directed to the critical links between environmental degradation and development efforts, as well as the commitments and needs stemming from participation of individual partner countries to key multilateral environmental agreements - among which the CBD.

Findings and recommendations formulated therein have been taken further in the country analysis and response strategies, leading in most cases to general references to the need to support sustainable use of natural resources (in energy water and agriculture), protect biodiversity and carry out environmental assessments (EIA/SEA) in relation to sensitive cooperation sectors, however, this has not frequently led to earmarking financial provisions for environmental mainstreaming purposes in National/Regional Indicative Programmes. Additional efforts are therefore required to ensure a more coherent and systematic uptake of environmental considerations within individual country/regional strategies and programming documents.

The Commission is preparing a Communication to be presented in early 2009 on the Integration of Cross-Cutting Issues in Development Cooperation in which an operational strategy to achieve further progress in environmental integration will be set out (in a Commission Staff Working Paper annexed to the Communication).

However the allocation of funds to biodiversity in Country Strategy Papers is still hampered by several obstacles. First, it is almost impossible under the current financial rules for geographic allocations to earmark funds for any sector before the programming. Second, partner countries have to allocate at least 75% of the available funding to 2 focal sectors: environment is very seldom selected as one of these sectors. Finally, and it is linked to the latter, the ownership principle (partner countries decide on their priorities) and the weakness of environment ministries result in environment being often low on the national development agenda.

Prevent negative impacts from cooperation projects on biodiversity through ex-ante SEAs and EIAs (A. 7.2.2)

According to the OECD DAC, a growing number of countries have legislation or regulations that prescribe the application of strategic environmental assessment (SEA), and many more are introducing it as one of their policy tools. Also many development co-operation agencies and their partners are making good progress in applying SEA[69]. However, it remains unclear to what extent countries ensure that SEAs are systematically carried out on relevant development strategies, programmes and projects.

A review of environmental assessment regimes of bilateral and multilateral development agencies by the Canadian International Development Agency (CIDA), on behalf of the DAC

[69] OECD, DAC High Level Meeting 21 May 3008, Policy Statement on Strategic Environmental Assessment, http://www.oecd.org/dataoecd/32/55/40909638.pdf.

Working Party on Environmental and Development Assistance[70], found that all the development agencies of the EU Member States that were analysed (EU-15 countries with the exception of Luxembourg, Spain, Portugal, and Greece) consider environmental assessment in there procedures to a certain extent. However, their application methods and stringency differ from country to country. Some have already implemented structured and stringent processes; others only provide guidance documents and recommendations. Overall, it remains unclear how systematically environmental impact assessment (EIA) for development projects funded by Member States is carried out, and to what extent it prevents and mitigates negative impacts on biodiversity.

As regards the European Community, quite a few Country Strategy Papers include references to undertaking EIA and SEA in relation to environmentally sensitive cooperation sectors. Alongside with more traditional project-level EIA, a significant number of SEA are underway or actively planned as part of EC-supported sector wide programmes in areas such as transport and infrastructure, sugar sector reform, regional development planning. A requirement to carry out SEA and EIA is specified in the new legal basis for EC development cooperation financed under the EU budget (DCI Regulation, art 22(4)).

There is a need fir further progress in ensuring that environmental assessments (SEA/EIA) are systematically carried out in relation to environmentally sensitive aid operations funded by Member States and the EC, to prevent and minimize negative impacts on biodiversity and enhance environmental benefits wherever possible.

[70] Canadian International Development Agency, http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-218131217-PEH.

Objective 8. To substantially reduce the impact of international trade on global biodiversity and ecosystem services.

A. Context

The "Ecological Footprint of EU countries", which directly measures the extent to which Europe's resource use can be replicated globally, is increasing while the EU's biocapacity has decreased. The resulting ecological deficit means that biological resource use and waste emission is about 2.5 times greater than the biological capacity available within Europe, showing that Europe cannot sustainably meet its consumption demands from within its own borders. On top of improving international governance (objective 6) and enhancing development cooperation (objective 7), it is important to enhance mutual supportiveness of trade and biodiversity measures. The EU has promoted the integration of the environmental dimension into international trade (for instance through its work on trade–related sustainability impact assessments) and in global efforts to curb unsustainable production and consumption patterns — but, with few concrete results for biodiversity to date. Some progress has been achieved on wildlife trade through active engagement in the Convention on International Trade in Endangered Species (CITES). More Substantial progress has been made in promoting forest law enforcement, governance and trade (FLEGT).

B. Progress assessment

Target 8.1 Impact on biodiversity of EU trade significantly reduced by 2010 [and again by 2013]

Enhancing co-benefits between biodiversity, trade agreements, WTO and Fisheries Partnership Agreements (A.8.1.1, 8.1.2 and 8.1.7)

As part of its trade-related Sustainability Impact Assessment (SIA) Programme, the Commission is in the process of conducting SIAs for all its planned regional and bilateral free trade and partnership agreements, be they in Asia, Africa or Latin-America. These studies will include an assessment of potential impacts on biodiversity (e.g. as a result of trade liberalisation in biofuels) and will identify possible preventive or mitigation measures. A case in point is the SIA that is being conducted for the planned EC-Mercosur Free Trade Agreement. This will cover case studies in relation to the effects of trade liberalisation in agricultural products and biofuels. In all cases, a key challenge will be to ensure that the recommendations made in these studies inform the negotiations, i.e. that they are translated into concrete policy measures, be they trade or non-trade related.

The EU is promoting in the negotiations of the WTO's Doha Development Agenda the objective of sustainable development (paragraphs 6 and 51 of the Doha Declaration) and enhancing the mutual supportiveness of trade and environment (notably paragraphs 28 and 31). However, little progress has so far been achieved in WTO's Committee on Trade and Environment.

The Commission is at the final stage of renegotiating the new Fisheries Partnership Agreements which will allow to support the sectoral fisheries policy of the third countries with a view of establishing a sustainable and responsible fisheries policy in their waters. In 2007, the fisheries partnership agreements with Ivory Coast, Madagascar and Guinea Bissau were successfully renegotiated. In March 2007 the mid-term modification of the FPA with Seychelles was finalised. In March 2008, the Commission negotiated a new fisheries protocol (1st August 2008 to 31 July 2012) with Mauritania. The current Fisheries Partnership Agreements in force (as from 1.03.2008) are: Cap Verde, Comoros, Ivory Coast, Gabon, Guinea Bissau, Greenland, Kiribati, Madagascar, Mozambique, Morocco, Mauritania, Micronesia, Solomon, Sao Tomé, Seychelles. In 2008 the Commission will renegotiate the agreement with Guinea Conakry and Mauritius as these are the only two remaining countries that do not yet benefit from a FPA.

Promoting implementation of the Bonn Guidelines on Access and Benefit Sharing (ABS), the negotiations of an international ABS regime and the prior informed consent when commercially using traditional knowledge (A. 8.1.3 and 8.1.9

The Commission and many Member States engaged specific efforts to raise the awareness of – and promote implementation of the Bonn Guidelines. The EU contributed to successful adoption of the standard Material Transfer Agreement under the FAO International Treaty in June 2006. The EU has been a major player and contributor to the negotiations of an International Regime on Access and Benefit Sharing under the CBD. The mandate adopted at the 7th Conference of the Parties of the CBD has been amended by the Eighth and Ninth Conferences of the Parties in March 2006 and May 2008 respectively. The Commission and several Member States have provided the majority of funds allowing the organisation of expert - and negotiating ABS working group meetings of the CBD. In line with the EU objectives outlined in Conclusions of the EU Environment Council adopted in June 2007 and March 2008, the EU provided a series of notifications to the CBD Secretariat and participated constructively to these CBD ABS negotiations. At the CBD COP9 in Bonn in May 2008, major progress was reached as a detailed roadmap for finalising this negotiation by the tenth Conference of the Parties in 2010 was adopted.

The European Commission and several Member States are raising awareness of Article 8j of the CBD and relevant parts of the Bonn Guidelines, and some Member States with indigenous communities (e.g. Sweden and Finland) undertook major regulatory and other measures protecting traditional knowledge of the indigenous and local communities. Traditional knowledge is recognised as part of biodiversity related research. The EC and the Member States provided financial support to enable representatives of indigenous groups to participate as observers in the meetings of the Convention on Biological Diversity including the international ABS negotiations. The EC and Member States also push for advancing work on the protection of traditional knowledge in the World Intellectual Property Organization and for recognition of the UN Declaration on the Rights of Indigenous People adopted on 13 September 2007 in relevant fora.

Support the implementation of the Convention on International Trade in endangered Species (CITES) (A. 8.1.4 and 8.1.8)

Regular meetings by the EU Scientific Review Group (SRG) meeting were held and several positive and negative opinions were established for imports into the EU of specific CITES

species of certain countries. These were followed up where necessary with consultation by the Commission with Range States. SRG negative opinions were published in Commission Suspension Regulations. Reviews and studies were undertaken to assist the SRG.

A Commission study of the enforcement of the EC CITES Regulations in EU-25 was finalised in December 2006. As a result of the study the Commission adopted on 13th June 2007 a Recommendation to the Member States identifying a set of actions for the effective enforcement of the EC CITES Regulations. The recommendations were formally sent to Member States (autumn 2007) and replies are awaited for follow up action. In its December 2006 conclusions, the Council also underlined the importance of effective implementation of the CITES Convention and EC CITES Regulations, it stressed the need for capacity-building on CITES in developing countries and called upon Member States to reinforce efforts to combat illegal trade. The CITES Secretariat has prepared proposals to implement CoP decisions and capacity buildings programmes to be considered in the framework of ENRTP.

A Study on Effectiveness of EU regulations has been finalised and the Commission is currently considering its follow-up.

The EU has actively prepared for and participated in the 14th Conference of the Parties (COP14) of CITES, which took place in the Hague in June 2007. CITES COP14 adopted some important decisions such as on ivory trade and the CITES Strategic Plan, which were supported by the EU. Parties also added Brazilwood to CITES control, but did not adopt EU proposals for listing additional tree species under CITES Appendices. CoP agreed however on further development of these and new proposals for CoP15 (2010). Import restrictions into the EU are in place for mahogany and ramin of non-sustainable source.

According to the figures available from CITES biennial reports, a total of 106,754 import documents were issued from 2003 to 2006 for the Member States. The number of import applications that were denied and reported during that 2003-2007 is 724. Member States reported a total of 108,140 seizures during the 2003/2004 and 2005/2006 reporting cycles. Between the 2003/2004 and 2005/2006 reporting cycles an increase was reported from 37,287 seizures in 2003/2004 to 70,853 seizures in 2005/2006 representing a net change of 31% (change in the number of seizures expressed as a percentage of total trade for the two reporting periods).

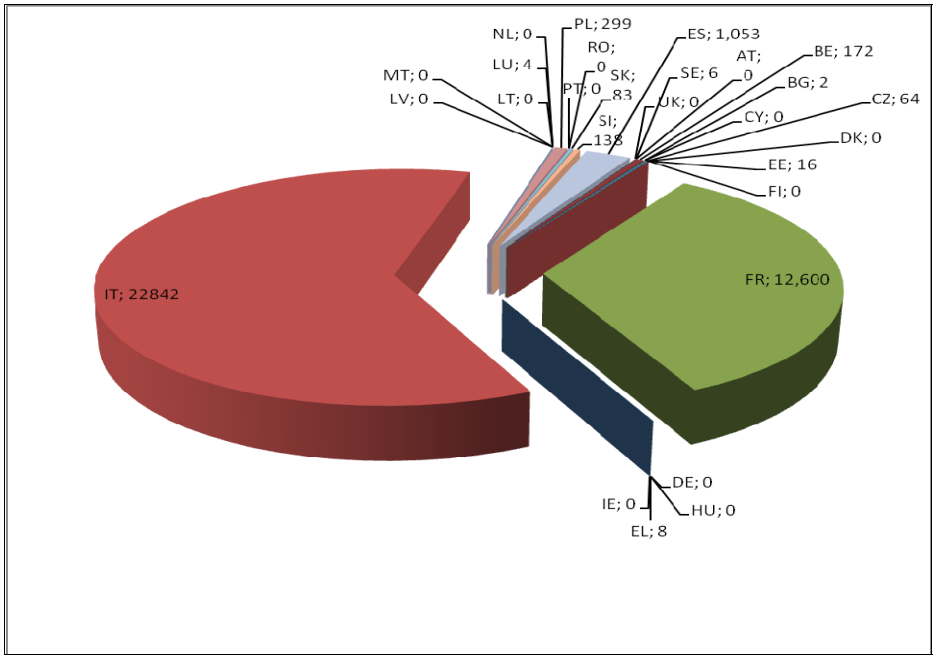


Figure 19: Number of seizures reported during the 2003/4 CITES reporting cycle. (Note: This chart is based on information received from Member States up to 20 June 2008 and may be subject to change. Source: Country Profiles)

All Member States paid their annual financial contributions to the CITES Trusts Funds, amounting to a total of USD 2 015 572 in 2006. Eight Member States and the European Commission also provided financial contributions to developing countries for CITES related activities. These contributions range from financial support provided to Tanzania to implement CITES-related conservation projects, financial support to developing countries for participation in the CITES Conference of the Parties (COP) to supporting activities such as CITES training workshops that were conducted for CITES authorities in Cambodia and Vietnam and financial assistance provided to the Great Apes Survival Project (GRASP) as well as support to an ITTO-CITES project on capacity building on the implementation of CITES listed timber species.

Support the sustainable consumption, in particular of wood products (A. 8.1.4 and 8.1.5)

The European Commission and Member States have engaged in a wide range of measures supporting the sustainable production and consumption. These range from specific public procurement measures to promoting forest certification. On 16 July 2008 the Commission presented a series of proposals on sustainable consumption and production that will contribute to improving the environmental performance of products and increase the demand for more sustainable goods and production technologies. The proposals also seek to encourage EU industry to take advantage of opportunities to innovate. A range of policies at EU and national level already foster resource efficient and eco-friendly products and raise consumer awareness. The proposals complement these policy instruments and provide measures where gaps exist. These proposals are an integral part of the European Union's renewed Sustainable Development Strategy (EU SDS) which reinforces the EU's long-standing commitment to meet the challenges of sustainable development and builds on initiatives and instruments at EU and international level such as the United Nations. The building blocks of the European Union's policy on sustainable consumption and production include inter alia an Action plan on sustainable production and consumption and sustainable industrial policy and a proposal to

set ambitious targets for green public procurement linked to common green procurement criteria[71].

As for external cooperation, the EC launched in 2008 the SWITCH programme (EUR 90 millions), focusing on sustainable consumption and production in Asia. For the first call for proposal, two projects focused on wood products and transformation industry.

Combat illegal logging (A. 8.1.6)

Significant progress has been made in implementing the European Union (EU) Action Plan for Forest Law Enforcement Governance and Trade (FLEGT) adopted in 2003. Though the ultimate goal of the Action Plan is to encourage sustainable management of forests, ensuring legality of forest operations is considered a vital first step. The Plan focuses on governance reforms and capacity building, to ensure timber exported to the EU comes only from legal sources. It includes ideas for action in areas such as public procurement and the private sector.

A key element of the Action Plan is a voluntary scheme to ensure that only legally harvested timber is imported into the EU from countries agreeing to take part in this scheme. The Council adopted a Regulation in December 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU. Once agreed, the VPAs will include commitments and action from both parties to halt trade in illegal timber, notably with a license scheme to verify the legality of timber. The agreements will also promote better enforcement of forest law and promote an inclusive approach involving civil society and the private sector.

In accordance with the FLEGT Regulation a FLEGT Committee has been established. The Committee is comprised of Member States representatives and assists the Commission in the implementation of the FLEGT Regulation. Detailed rules for the implementation of the FLEGT Regulation within the EU are under discussion in the Committee.

The European Commission has been given a mandate from the Council of Ministers to conduct negotiations in view of concluding such FLEGT VPAs. While the European Commission is leading in these negotiations, several EU Member States play a key role in supporting the negotiations and the future implementation. Negotiations are currently underway with Malaysia, Indonesia, Cameroon and Congo Brazzaville and the first VPA has been signed with Ghana in September 2008. The Commission works to start negotiations with several other countries. To complement FLEGT VPAs, the Commission has also proposed a Regulation on the Placing of the Market of Timber and Timber Products[72]). Funding for FLEGT-related projects has been provided through development cooperation instruments managed by the Commission and Member States. An increasing number of EU Member States are adopting green public procurement policies requiring timber and timber products to be from legal and sustainable sources. Countries implementing such policies include Belgium, Denmark, France, Germany and the UK. These policies are expected to have an important influence on the EU market – in many of them FLEGT licenses will be accepted as reliable proof of legality. A number of EU private sector timber trade federations have made commitments through Codes of Conduct to eliminate illegally harvested timber from their supply chains and several major banks have put in place policies to ensure clients are not associated with illegal logging activities.

---

71 Commission Communication COM(2008) 400/2 on 'Public procurement for a better environment'.

72 COM(2008) 644/3.

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

A. Context

There is broad scientific and political consensus that we have entered a period of unavoidable and unprecedented climate change. Impacts on biodiversity in the EU are already measurable. Climate change has the potential, over a period of a few decades, to undermine our efforts for the conservation and sustainable use of biodiversity. Biodiversity and climate change are linked. Issues of biodiversity loss and climate change cannot be addressed effectively unless this link between people, biodiversity and climate is recognized. A failure to do so compromises the efficiency of measures in both fields. While this adds a layer of complexity, it also opens the way to synergies to encourage measures beneficial for both halting biodiversity loss and combating climate change.

Substantial cuts in global greenhouse gas emissions are required to mitigate the longer–term threat to biodiversity. We must honour our Kyoto commitments and more ambitious global emissions targets post–2012 are needed in order to limit the increase in global annual mean temperature to no more than 2^{o}C above pre–industrial levels.

Conservation and sustainable use of biodiversity can help limit atmospheric greenhouse gas concentrations because forests, peat lands and other habitats store carbon. Healthy ecosystems are essential in any adaptation and mitigation strategy. Biodiversity and ecosystems play a dual role with regards to adaptation to climate change: 1) Adaptation measures are necessary to allow biodiversity and ecosystems to adapt. 2) Conservation and sustainable use of biodiversity contribute adaptation to climate change by enhancing the resilience of ecosystems. In addition policies will also be needed to help biodiversity adapt to changing temperature and water regimes. This requires in particular securing coherence of the Natura 2000 network. Care must also be taken to prevent, minimise and offset any potential damages to biodiversity arising from climate change adaptation and mitigation measures.

B. Progress assessment (Synthesis of EU-level actions)

Target 9.1 % reduction in greenhouse gas emissions achieved by 2010

Progress on Kyoto targets

The EU BAP recognises the vital importance of helping to reduce the impacts of climate change by reducing greenhouse gas (GHG) emissions in accordance with the EU's agreed

Kyoto target and burden sharing agreements with Member States. However, progress with GHG emission reductions has been mixed. The latest EEA inventory of GHG emissions by Member States indicates that as a whole EU-27 emissions have decreased by 7.7% compared to 1990 (with a 0.3% decrease between 2005 and 2006). Several states, especially new Member States (i.e. Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia) have substantially reduced their emissions and are already well within their individual Kyoto targets. [Spreadsheet Climate Change V1.3]. Furthermore, although emissions are increasing in most of these countries, projections indicate that all of the EU-12 are expected to easily achieve their Kyoto targets in 2010. This will be achieved with existing measures in all of the EU-12 other than Slovenia, where additional measures and the use of carbon sinks and Kyoto mechanisms will be required.

Progress in the EU-15, which has a collective Kyoto target of reducing emissions by 8% has been much slower. Across the EU-15 as a whole, 2006 emissions were only 2.7% below baseline levels and these trends suggest that it will not meet its Kyoto target without addition measures and external credits. Several of the EU-15 Member States have seen substantial increases in emissions compared to baseline levels, including Austria, Finland, Greece, Ireland and especially Portugal and Spain. Only three Member States are projected to meet their Kyoto targets with existing measures, namely Germany, Sweden and the United Kingdom. However, if the remaining EU-15 implement existing and additional measures fully and quickly and make use of carbon sinks and Kyoto mechanisms, then all but three are expected to meet their targets. Projections suggest that Italy will just miss it target, and that emissions will be 2% above the target level in Denmark and 14.2% above the target in Spain.

NB. The data and text included in the individual Member State profiles and summaries were based on the 2005 emissions data and are therefore not consistent with this account.

Target 9.2 Global annual mean surface temperature increase limited to not more than 2°C above pre-industrial levels

Action to meet the target of limiting global climate change to 2°C is a top EU political priority. Current projections indicate that the Community will reach its Kyoto target of reducing its greenhouse gas (GHG) emissions by 8% by 2012 compared to base year levels if Member States put in place and implement as soon as possible their additional policies and measures. As part of comprehensive package of measures to establish a new climate and energy policy for EU the Commission has put forward legislative proposals for achieving at least 20% emission reduction in the EU by 2020 compared to 1990 levels. This target will be extended to 30% if there is an international agreement[73].

A Commission Communication on deforestation[74] proposes that, within the framework of the UN Framework Convention on Climate Change negotiations on the future climate regime, the EU calls for halting global forest cover loss by 2030 at the latest and reducing gross tropical deforestation by at least 50% by 2020 from current levels. This objective would provide major climate change and biodiversity benefits by 2020.

[73] COM(2007) 2 final.
[74] COM(2008) 645.

Target 9.3 Climate change adaptation or mitigation measure from 2006 onwards delivering biodiversity benefits, and any negative impacts on biodiversity prevented or minimised, from 2006 onwards.

Measures to reduce climate change mitigation impacts on biodiversity – EU Task Force, White Paper

Following its 2007 Green Paper[75] the Commission is producing a White Paper on climate change adaptation to be adopted in spring 2009. This shall emphasise the importance of preserving ecosystem integrity and boosting its resilience to rapidly changing and degrading conditions as healthy ecosystems are an essential part of any climate change adaptation strategy. Biodiversity and ecosystems are recognised as cross-cutting issue. There will be a need to care to ensure that adaptation and mitigation measures are not detrimental to biodiversity. Rendering ecosystems, social and economic systems more resistant will only be possible by working with nature, technology and individuals. This means relying on a combination of three assets: Human capital green infrastructure and grey infrastructure.
In this sense the White Paper may propose to build a "green infrastructure", an interconnected network of natural areas, including some agricultural land, wetlands, forests, marine areas. This would help ensure vital ecosystem services such as the regulation of stormwater, temperatures, flooding risk, water, air and ecosystem quality.

Renewables

Guidelines on relevant renewable energies focusing on wind, hydro & tidal barrages have been or are being prepared.

RTD

Research is being undertaken in most Member States on the existing and likely impacts of climate change on biodiversity and ecosystems. Several national and international research programmes have developed model-based projections of impacts on various taxa groups (e.g. birds). However, there is no indication that any country has yet produced a comprehensive climate change risk assessment for habitats and species of Community interest. A Commission study contract investigates biodiversity and climate change in relation to the Natura 2000 network and is due for completion in autumn 2009. Other projects funded under the Community RTD programmes and INTERREG IIIB aim to provide a better understanding of the large scale environmental risks to biodiversity from climate change. The MACIS project supported by RTD FP6 (see http://www.macis-project.net/links.html) will deliver (in November 2008) a detailed report on adaptation and mitigation measures in different and their impact on biodiversity. However, more work is necessary in particular with a view to better understand the link between biodiversity and climate and with a view to positive feedbacks that may work in our favour but also improving the understanding of the capacity of species and ecosystems to adapt to climate change.

Adaptation strategies on national and regional level

[75] COM(2007) 354 final.

The degree to which Member States' climate change adaptation strategies include biodiversity considerations is unclear. No Member State has clearly stated that it has developed a biodiversity adaptation action plan with defined actions, time tables and responsibilities, although some have stated they include actions within their national biodiversity action plans. Nevertheless, sometimes climate change programmes already include nature conservation issues (e.g. climate change programme in Bavaria).

Target 9.4 Resilience of EU biodiversity to climate change substantially strengthened by 2010

Adaptation measures to increase biodiversity resilience to climate change

Climate change adaptation measures were not addressed in the questionnaire that was distributed to Member States. Furthermore, although some information is provided on climate change adaptation in the regular national reports to the CBD and UN Framework Convention on Climate Change, these mostly date back to 2005 and are thus rather out of date.

Nevertheless, from the information that is available and the response from Member States to the draft country summaries, there appears to be little evidence that significant adaptation biodiversity measures are being planned or implemented in most countries. Some Member States have developed adaptation strategies, such as in Finland, which produced a National Strategy for Adaptation to Climate Change at the end of 2004. However, the degree to which such strategies include biodiversity considerations is unclear from the information available to this review. No Member State has clearly stated that it has developed a biodiversity adaptation action plan with defined actions, time tables and responsibilities (although some have stated they include actions within their national BAP). For example, the UK Biodiversity Partnership has produced guidance on building the capacity for biodiversity climate change adaptation (*Conserving biodiversity in a changing climate*, Defra 2007). However, it does not contain a programme of actions and it is not clear whether it will be supported by the statutory adaptation programme that is being developed for England and Wales.

Furthermore most of the measures that are promoted as being to increase biodiversity resilience appear to be actions that are already being taken, or are planned, to meet existing conservation needs (e.g. the protection and management of sites). For example, the EU BAP and several Member States refer to the establishment of ecological networks as being an important measure to increase resilience (by overcoming habitat fragmentation) and to help species to move in response to climate change. However, there is little evidence of substantial implementation of such initiatives in most countries other than the Netherlands where it receives a high level of governmental support.

It is clear that a substantial amount of research is underway in most Member States on the existing and likely impacts of climate change on biodiversity and ecosystems. Several national and international research programmes have for example developed model-based projections of impacts on various taxa groups (e.g. birds). However, there was no indication that any country has yet produced a comprehensive climate change risk assessment for habitats and species of community interest, as required under the EU BAP.

Data sources:

A9.1.1

2006 emissions: EEA (2008) *Annual European Community greenhouse gas inventory 1990–2006 and inventory report 2008. Submission to the UNFCCC Secretariat*.
http://reports.eea.europa.eu/technical_report_2008_6/en

Projections: EEA (2007) *Greenhouse gas emission trends and projections in Europe 2007*. http://reports.eea.europa.eu/eea_report_2007_5/en

EEA data are based on EU Member States greenhouse gas inventories and projections.

A9.4.1 & 9.4.3

National Reports to the Convention on Biological Diversity

National Reports to the UN Framework Convention on Climate Change

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.

A. Context

The 6th Framework Programme[76], complemented by Member States' research funding, has helped strengthen a European approach to biodiversity, land use and climate change research and improve scientific support to policy for the EU and its partner regions, in particular those of the developing world.

However, much more is needed to fill critical knowledge gaps. A helpful assessment of research needs has been produced by the European Platform for Biodiversity Research Strategy. The 7th Framework Programme (FP7)[77] provides opportunity to address these needs through cooperation, new infrastructures and capacity building.

The Millennium Ecosystem Assessment (MA) has played a key role in bringing to political and public attention the current state and trends of biodiversity and ecosystem services globally and we need to ensure that this is regularly reviewed and updated.

B. Progress assessment

Target 10.1 Research findings on biodiversity and ecosystem services has substantially advanced our ability to ensure conservation and sustainable use by 2010 [and again by 2013]

Strengthen research on biodiversity

The European Community's research Framework Programmes (FP), together with Member States' research investments, are helping strengthened a European approach to biodiversity, land use and climate change research and improving scientific support to policy for the EU and its partner regions, including those of the developing world. Research undertaken under the Community's 6th Framework Programme (FP6) from 2002-2006 to investigate pressures on biodiversity (e.g. ALARM, MACIS, COCONUT, DAISIE) is already feeding into the development of EU biodiversity policy. A list of the type of projects funded under FP5, FP6 and FP7 is given below

Based on available information it appears that at least 14 Member States have a dedicated national or sub national programme that supports biodiversity research (Belgium, Bulgaria, Cyprus, Czech Republic, Finland, France, Germany, Hungary, Ireland, Luxembourg, Netherlands, Spain, Sweden, United Kingdom), 7 Member States do not have a dedicated

---

[76] Decision No 1513/2002/EC, OJ L 232, 29.8.2002, p.1.

[77] COM (2005) 119 final.

programme (Austria, Denmark, Estonia, Greece, Latvia, Lithuania, Romania) and 6 did not provide information (Italy, Malta, Poland, Portugal, Slovakia, Slovenia).

Financial resources to European and National biodiversity research

Research is essential to help achieve the objectives of the EC Biodiversity Action Plan. In addition to the efforts at EC level, the Member States should be encouraged to allocate more resources to biodiversity research, including through the EC Research and Development Framework Programmes, in view of substantially strengthening the knowledge base for conservation and sustainable use of biodiversity. Community financial support allocated to biodiversity projects in the context of environmental research under FP5 (1998-2002) was of EUR 58 597 500 allocated to 39 projects, and of EUR 77 480 500 for 20 larger projects – plus EUR 78 608 847 for 13 projects focusing on ecosystems under FP6 (2002-2006). There have been 2 calls for proposals in the first 2 years of FP7, 8 successful proposals (HUNT, SOILSERVICE, HighARCS, LiveDiverse, PALMS, SCALES and EBONE) as well as the LIFEWATCH support are expected to be funded with a Community contribution of EUR 23 122 421. This period corresponds with half of the duration of the earlier FPs, but the funding profile over the duration of FP7 is expected to rise quite steeply towards the end. FPs are also providing support to other initiatives that focus on ecosystems and also address biodiversity to a greater or lesser extent. For example, programmes that support research infrastructure or encourage the mobility of researchers have been active in this field. Most notably, the FP7 "LifeWatch", an e-science and technology infrastructure for biodiversity data and observatories, will be funded by EC for EUR 5 000 000 for the preparatory phase (2008-2010) through the "infrastructure" budget and the Member states will add further EUR 4.6 million. Another example is BiodivERsA, an ERA-Net in biodiversity research, which is co-funded by EC (EUR 2 837 440) and the Member States (EUR 20 million).

23 Member States provide annual contributions to DIVERSITAS, an international programme of biodiversity science, which is proposing an integrated research framework to the international scientific community. The Programme is a partnership of inter-governmental and non-governmental organisations formed to promote, facilitate and catalyse scientific research on biodiversity – its origin, composition, ecosystem function, maintenance and conservation.

Millennium Ecosystem Assessment (MA)

As part of the Potsdam initiative agreed by G8 in 2007, a study on "The Economics of Ecosystems and Biodiversity" (TEEB) has been jointly initiated by the European Commission and Germany in collaboration with the European Environment Agency. Under the lead of Indian economist, Pavan Sukhdev, the first results of this assessment of the global economic benefit of biological diversity, the costs of the loss of biodiversity and the failure to take protective measures versus the costs of effective conservation have been presented at CBD COP9 in May 2008. A second phase of this study will further develop a methodological framework for valuation of the services provided by ecosystems, as a contribution to the Millennium Development Goals.

The European Community is also engaged in the global strategy for follow-up to the UN Millennium Ecosystem Assessment and is committed to develop a sub-global assessment (SGA) for the European region, using the EURECA project launched by the European Environment Agency, and the outcomes of the study on the valuation of ecosystem services.

According to the FP7 road map covering the research priorities for the next calls, there will be a call for research proposals that will adapt and apply concepts and methods of the Millennium Ecosystem Assessment, integrating all-taxa biodiversity inventories on key ecosystems, to assess conditions of European ecosystem services. This will be properly integrated with the work and results of the EEA's EURECA project. Research effort will be focused over the course of FP7 on making human use of biodiversity sustainable. As part of this, research support will be provided to follow up TEEB, with work on economic, social and environmental costs and benefits of conservation and use of biodiversity. Other recommendations for research in this direction will be taken into consideration, including those identified by the European Platform for Biodiversity Research Strategy (EPBRS). Six Member States (Belgium, Cyprus, Czech Republic, France, Germany, Hungary) have indicated that they have plans to follow up on the Millennium Ecosystem Assessment, 10 Member States do not (Austria, Bulgaria, Denmark, Estonia, Ireland, Latvia, Netherlands, Romania, Sweden, UK) while the other Member States did not respond to this aspect.

Science-policy interface

The European Platform for Biodiversity Research Strategy (EPBRS), an informal science-policy interface whose main aim is to identify the knowledge gaps that hinder the creation or application of policy, or that make it difficult to manage ecosystems effectively, has been very active. The EPBRS, which is used to channel the message that the Member States must share the burden of financing biodiversity research, has contributed to the European consultation on an international mechanism for scientific advice on biodiversity (IMoSEB).

Furthermore, at CBD COP9 in May 2008 the EU and its Member States have supported UNEP's proposal for establishing an Intergovernmental Platform on Biodiversity and Ecosystems Services (IPBES), to strengthen independent scientific advice to global policy making. The European Community is examining how to contribute to the establishment of an EU mechanism for independent, authoritative research-based advice to inform implementation and further EC policy development. Subject to funding being found from existing financial resources, the European Community is examining how to contribute to the establishment of an EU mechanism for independent, authoritative research-based advice to inform implementation and further EC policy development.

Twelve countries (Austria, Belgium, Cyprus, Czech Republic, Denmark, France, Hungary, Ireland, Latvia, Slovenia, Sweden, UK) have a dedicated national or sub-national mechanism to ensure biodiversity outcomes are reflected in policy development and implementation. However, the countries that have developed these for a are not necessarily the same than those that have research programmes for biodiversity. Six countries (Bulgaria, Cyprus, Germany, Greece, Lithuania, Spain) do not have a forum including a number of countries that have research programmes for biodiversity, and 9 countries did not respond to this aspect of the questionnaire (Estonia, Finland, Italy, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia).

Understanding the links between biodiversity, ecosystem services, climate change and human well-being presents one of the greatest scientific challenges facing mankind. To tackle this challenge successfully the key role of biodiversity and ecosystems with regards to adaptation to and mitigation of climate change must be further explored and promoted. This requires further strengthening (under FP7 and national research programmes) of the European Research Area, its international dimension, research infrastructures, the science–policy

interface, monitoring and data interoperability for biodiversity. This should exploit emerging information and communication technologies.

Adequate financial resources should be provided to support and promote an improved knowledge base for biodiversity and ecosystems, and efficient science-policy interface on biodiversity, ecosystem services and human well-being.

Table 9: Examples of projects funded under FP5, FP6 and FP7[78]

BIODIVERSITY PROJECTS FUNDED UNDER FP5, FP6 AND FP7						
FP5						
FP	**Acronym**	**Full title**	**Contract**	**No**	**Instrument**	**EC part**
FP5	TRANSPLANT	Extinction risks and the re-introduction of plant species in a fragmented Europe	EVK2-CT-1999-	00004		*€ 1.606.590*
FP5	CASCADE	Securing gene conservation, adaptive breeding potential and utilisation of a model multipurpose tree species (*Castanea Sativa mill.*) in a dynamic environment	EVK2-CT-1999-	00006		*€ 1.688.261*
FP5	METABIRD	Viability of bird metapopulations	EVK2-CT-1999-	00017		*€ 1.055.600*
FP5	MIDI-CHIP	Design and testing of dna microarrays to monitor microbial diversity with adequate biodiversity indexes, using cyanobacteria in freshwater as a model system	EVK2-CT-1999-	00026		*€ 1.861.775*
FP5	FOSSILVA	Dynamics of forest trees biodiversity: linking genetic, palaeogenetic and plant historical approaches	EVK2-CT-1999-	00036		*€ 1.580.561*
FP5	PLANT DISPERSAL	Dynamics of plant dispersal-related traits in fragmented European habitats: consequences for species survival and landscape management	EVK2-CT-1999-	00037		*€ 1.178.180*
FP5	BIOSTRESS	Biodiversity in herbaceous semi-natural ecosystems under stress by global change components	EVK2-CT-1999-	00040		*€ 1.439.369*
FP5	Biodiversity Assessment	Biodiversity assessment tools	EVK2-CT-1999-	00041		*€ 2.299.649*
FP5	BIOMAN	Biodiversity and human impact in shallow lakes	EVK2-CT-1999-	00046		*€ 1.742.468*
FP5	Fauna Europaea	Fauna Europaea	EVR1-CT-1999-	20001		*€ 3.235.029*
FP5	ENHSIN	European natural history specimen information network	HPRI-CT-1999-	40010		*€ 200.000*
FP5	Coast Bird Diversity	Maintaining migratory coastal bird diversity : management through behaviour-based predictive population modelling	EVK2-CT-2000-	00066		*€ 1.041.564*
FP5	BABE	Beekeeping and biodiversity in Europe	EVK2-CT-2000-	00068		*€ 983.070*

[78] For further information please see the website on research of the European Commission http://ec.europa.eu/research/environment/themes/themes_en.htm

FP5	IMEW	Integrated management of European wetlands	EVK2-CT-2000-	00081		*€ 918.469*
FP5	PROBASE	Procedures for accounting and baselines for projects under joint implementation and the clean development mechanism	EVK2-CT-2000-	00083		*€ 770.154*
FP5	BIOECON	Biodiversity and economics for conservation	EVK2-CT-2000-	00086		*€ 1.530.672*
FP5	REGHAB	Reconciling gamebird hunting and biodiversity	EVK2-CT-2000-	20004		*€ 301.140*
FP5	BIOFORUM	European biodiversity forum - implementing the ecosystem approach	EVK2-CT-2000-	20006		*€ 509.826*
FP5	Euro+Med	European initiative for the euro+med plantbase	EVR1-CT-2000-	40004		*€ 1.195.700*
FP5	BioCASE	Biocase - a biodiversity collection access service for Europe	EVR1-CT-2000-	40017		*€ 1.935.494*
FP5	BioPlatform	European Platform for Biodiversity	EVK2-CT-2001-	20009		*€ 720.797*
FP5	FRAXIGEN	Ash for the future: defining European ash populations for conservation and regeneration	EVK2-CT-2001-	00108		*€ 1.987.537*
FP5	PASCALIS	Protocols for the assessment and conservation of aquatic life in the subsurface	EVK2-CT-2001-	00121		*€ 1.452.749*
FP5	Tlinks	Trophic linkages between above- and below-ground organisms as a key to successful restoration of biodiversity on ex-arable land across EU	EVK2-CT-2001-	00123		*€ 1.569.156*
FP5	MACMAN	Maculinea butterflies of the habitats directive and European red list as indicators and tools for habitat conservation and management	EVK2-CT-2001-	00126		*€ 2.988.660*
FP5	Giant Alien	Giant hogweed (*Heracleum Mantegazzianum*) a pernicious invasive weed: developing a sustainable strategy for alien invasive plant management in Europe	EVK2-CT-2001-	00128		*€ 1.641.229*
FP5	ABC	Access to Belgian collections of interest for biodiversity research	HPRI-CT-2001-	00159		*€ 325.000*
FP5	FRAP	Development of a procedural framework for action plans to reconcile conflicts between the conservation of large vertebrates and the use of biological resources: fisheries and fish-eating vertebrates as model case	EVK2-CT-2002-	00142		*€ 2.490.000*
FP5	LACOPE	Landscape development, biodiversity and co-operative livestock systems in Europe	EVK2-CT-2002-	00150		*€ 2.439.982*
FP5	RECIPE	Reconciling commercial exploitation of peat with biodiversity in peatland ecosystems	EVK2-CT-2002-	00154		*€ 1.505.559*
FP5	BioScene	Scenarios for reconciling biodiversity conservation with declining agricultural use in the mountains of Europe	EVK2-CT-2002-	00167		*€ 2.296.200*
FP5	BIOPRESS	Linking pan-European landcover change to pressures on biodiversity	EVK2-CT-2002-	00178		*€ 1.385.301*
FP5	LADAMER	Land degradation assessment in Mediterranean Europe	EVK2-CT-2002-	00179		*€ 831.439*

FP5	PGR Forum	European crop wild relative diversity assessment & conservation forum	EVK2-CT-2002-	20010		*€ 728.300*
FP5	CONSIDER	Conservation of soil organism diversity under global change	EVK2-CT-2002-	20012		*€ 930.965*
FP5	BioHab	Biohab, a framework for the coordination of biodiversity and habitats	EVK2-CT-2002-	20018		*€ 671.022*
FP5	ENBI	European network for biodiversity information	EVK2-CT-2002-	20020		*€ 3.000.000*
FP5	Eurocat	The catalogue of life : biodiversity resource and e-science gateway	EVR1-CT-2002-	20011		*€ 2.455.000*
FP5	LEDA	Life history traits of the northwest European flora: a database	EVR1-CT-2002-	40022		*€ 2.104.996*

FP6

FP	Acronym	Full title	Contract	No	Instrument	EC part
FP6	ALTER-Net	A Long-term Biodiversity, Ecosystem and Awareness Research Network	GOCE-CT-2003	505298	NoE	*€ 10.000.000*
FP6	IntraBioDiv	Tracking surrogates for intraspecific biodiversity: towards efficient selection strategies for the conservation of natural genetic resources using comparative mapping and modelling approaches	GOCE-CT-2003	505376	STREP	*€ 1.800.000*
FP6	SoBio	Mobilising the European Social Research Potential in Support of Biodiversity and Ecosystem Management	GOCE-CT-2003	505429	CA	*€ 460.000*
FP6	ALARM	Assessing LArge-scale environmental Risks with tested Methods	GOCE-CT-2003	506675	IP	*€ 12.000.000*
FP6	GLOCHAMORE	Global Change in Mountain Regions: An Integrated Assessment of Causes and Consequences	GOCE-CT-2003	506679	SSA	*€ 350.000*
FP6	EUMON	EUMON: EU-wide monitoring methods and systems of surveillance for species and habitats of Community interest	GOCE-CT-2004	006463	STREP	*€ 1.496.238*
FP6	EPRECOT	Effects of precipitation change on terrestrial ecosystems - a workshop and networking activity	GOCE-CT-2005	018066	SSA	*€ 143.100*
FP6	EDIT	Toward the European Distributed Institute of Taxonomy	GOCE-CT-2005	018340	NoE	*€ 11.900.000*
FP6	PROBIOPRISE	Creating a European platform for SMEs and other stakeholders to develop a research programme for pro-biodiversity business	GOCE-CT-2005	018356	SSA	*€ 649.581*
FP6	BIOSCORE	Biodiversity impact assessment using species sensitivity scores	GOCE-CT-2005	022661	STREP	*€ 911.169*
FP6	RUBICODE	Rationalising Biodiversity Conservation in Dynamic Ecosystems	GOCE-CT-2006	036890	CA	*€ 1.994.285*
FP6	BIOSTRAT	Developing the EU Biodiversity Research Strategy	GOCE-CT-2006	036847	SSA	*€ 771.000*
FP6	MACIS	Minimisation of and Adaptation to Climate change: Impacts on biodiversity	GOCE-CT-2006	044399	STREP	*€ 900.000*

FP6	COCONUT	Understanding effects of land use changes on ecosystems to halt loss of biodiversity due to habitat destruction, fragmentation and degradation	GOCE-CT-2006	044346	STREP	*€ 900.000*
FP6	ALARM TTC	Assessing LArge-scale environmental Risks with tested Methods	GOCE-CT-2006	046002	Top up	*€ 798.051*
FP6	BiodivERsA	An ERA-Net in biodiversity research		517836	ERA-NET	*€2 837 440*
FP6	ECOCHANGE	Challenges in assessing and forecasting biodiversity and ecosystem changes in Europe	GOCE-CT-2006	036866	IP	*€ 6.999.998*
FP6	EVOLTREE	EVOLution of TREEs as drivers of terrestrial biodiversity	GOCE-CT-2004	016322	NoE	*€ 14.300.000*
FP6	MarBEF	Marine Biodiversity and Ecosystem Functioning	GOCE-CT-2002	505446	NoE	*€ 8.707.000*
FP6	DAISIE	Delivering Alien Invasive Species Inventories for Europe	GOCE-CT-2003	511202	STREP	*€ 2.400.000*

FP7

FP	Acronym	Full title	Contract	No	Instrument	EC part
FP7	LiveDiverse	Sustainable Livelihoods and Biodiversity in Riparian Areas in Developing Countries		211392	CP-SICA	*€ 2.418.160*
FP7	SOILSERVICE	Conflicting demands of land use, soil biodiversity and the sustainable delivery of ecosystem goods and services in Europe		211779	CP-FP	*€ 3.475.774*
FP7	PALMS	Palm harvest impacts in tropical forests		212631	CP-FP	*€ 3.145.880*
FP7	HUNT	Hunting for Sustainability		212160	CP-SICA	*€ 2.929.304*
FP7	HighARCS	Highland aquatic resources conservation and sustainable development		213015	CP-SICA	*€ 1.455.676*
FP7	EBONE	European Biodiversity Observation Network; a project to design and test a biodiversity observation system integrated in time and space		212322	CP-FP	*€ 2.701.987*
FP7	SCALES	Securing the Conservation of biodiversity across Administrative Levels and spatial, temporal, and Ecological Scales		226852	CP-IP	*€ 6.995.640*
FP7	LIFEWATCH	e-science and technology infrastructure for biodiversity data and observatories	Capacities Programme			*€ 5.000.000*

B. THE FOUR KEY SUPPORTING MEASURES

Supporting Measure 1. Ensuring adequate financing

A. Context

Adequate financing, both for Natura 2000 and for biodiversity outside Natura 2000, is essential. The new Financial Perspectives for 2007–2013 open opportunities for co-financing of biodiversity and Natura 2000 under the European Agricultural Fund for Rural Development (EAFRD), the Cohesion and Structural Funds, Life+ and the 7th Framework Programme.

Agriculture, in managing a large part of the EU territory, conserves genes, species and habitats. Increasing use of agri–environment measures, organic farming and the support of Less Favoured Areas has favoured farmland biodiversity. The 2003 CAP reform promotes these and other pro–biodiversity measures. Measures under market and income policy, including mandatory cross–compliance, the single farm payment (decoupling) and modulation, should provide benefits to biodiversity.

The new Rural Development Regulation provides inter alia for enhanced support for Natura 2000, maintains agri–environmental measures and payments for areas with handicaps and provides for a set of measures in support of sustainable forest management (some tailored to enhance ecological value) such as forest–environment payments. Realisation of the full benefit of these measures as allocation to the different measures depend on implementation by Member States.

B. Progress assessment

Rural and regional development funds providing benefit for biodiversity and Natura 2000

The bases of "adequate finances" are the costs indicated in the National Biodiversity Strategies and Action Plans (NBSAP's) of the member states which include the estimated financial needs for the implementation of the Convention on Biological Diversity (CBD). However, in most cases the bases of the estimations are hard to track and thus not quite comparable. Moreover, the "adequate finances" is extremely difficult to calculate as it depends on a great number of (environmental) variables. More over in this section the funding not targeted for the implementation of the Habitats Directive is considered. Thus, the information with regards to spending under various Multilateral Environmental Agreements, spending in biodiversity related research and bilateral assistance is used.

Financing for the Natura 2000 network originates primarily from measures under Axis 2 of the Rural Development Programmes of each Member State/Region, as outlined by the Council Regulation (EC) No. 1698/2005, on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

The measures referred to aim to improve the environment and the countryside. These include agri-environment payments, support for non-productive investments, Natura 2000 payments

for the sustainable use of agricultural land and payments linked to Directive 2000/60/EC, forest-environment payments and Natura 2000 payments for the sustainable use of forests. It is the Member States' responsibility to decide on the allocation for the different measures in their Rural Development Programmes.

Analysing the allocations of the different Member States on different measures for agricultural land we can conclude that agri-environment measure is the most important for Natura 2000 implementation. Several Member States have chosen not to use Natura 2000 payments and have allocations exclusively for agri-environment measures (e.g. United Kingdom, the Netherlands, Malta, Luxembourg, Slovenia, Portugal, France). Some Member States decided to use Natura 2000 agricultural payments combined with agri-environment measures (e.g. Austria, Hungary, Czech Republic, Latvia, Lithuania).

As for forestry land, nearly the same amount of Member States has Natura 2000 forestry payment combined with forest-environment measures (e.g. Austria, Czech Republic, Slovakia) as those allocating only for forest-environment measures (e.g. the Netherlands, Portugal, Cyprus, France).

(For further information see Objective 2, Target A2.1.)

A couple of categories of the European Regional Development Fund (ERDF) and Cohesion Fund (CF) spending are related to the protection of biodiversity and management of natural resources. The most relevant category is No. 51 the “Promotion of biodiversity and nature protection” (for which EUR 2 719 million has been allocated). Also highly relevant is the category No. 55 as it covers the "protection of natural assets" (for which EUR 1 146 million is allocated). The category No. 56 is the "protection and development of natural heritage" (with a total of EUR 1 376 million) that also might have some indirect, positive impact on our natural heritage. It was the Member States' responsibility to decide on the allocation of development funds and to adopt it through their National Development Plans and the Operational Programmes (OPs) giving more detailed information on measures to be taken and projects to be financed. Though all OPs are approved by the European Commission up to now, the fact that structure of OPs does not have follow the categories the Community Strategic Guidelines, any comprehensive assessment is complicated by the fact that the categories of funding for most financial instruments do not allow for a breakdown of allocation for Natura 2000 and biodiversity. Additional support to the regional development funds were provided by INTERREG and now by European Territorial Cooperation schemes contributing to bi- or multilateral projects.

(For further information see Objective 4, Target A4.1.)

Comparing rural and regional development expenditure of Member States we can conclude that unfortunately, there are quite a few Member States that have low allocations both on Natura 2000 payments (agricultural and forestry land together) and on direct nature conservational categories (see Figure 20) (e.g. Cyprus, Denmark, Finland, Luxemburg, Malta), whereas there are some Member States that give emphasise to the target from both financial instruments (e.g. Czech Republic, France, Spain, Lithuania). Interestingly, there are countries that have high allocation on Natura 2000 payments but quite low from regional development funds (e.g. Germany, Estonia and Ireland).

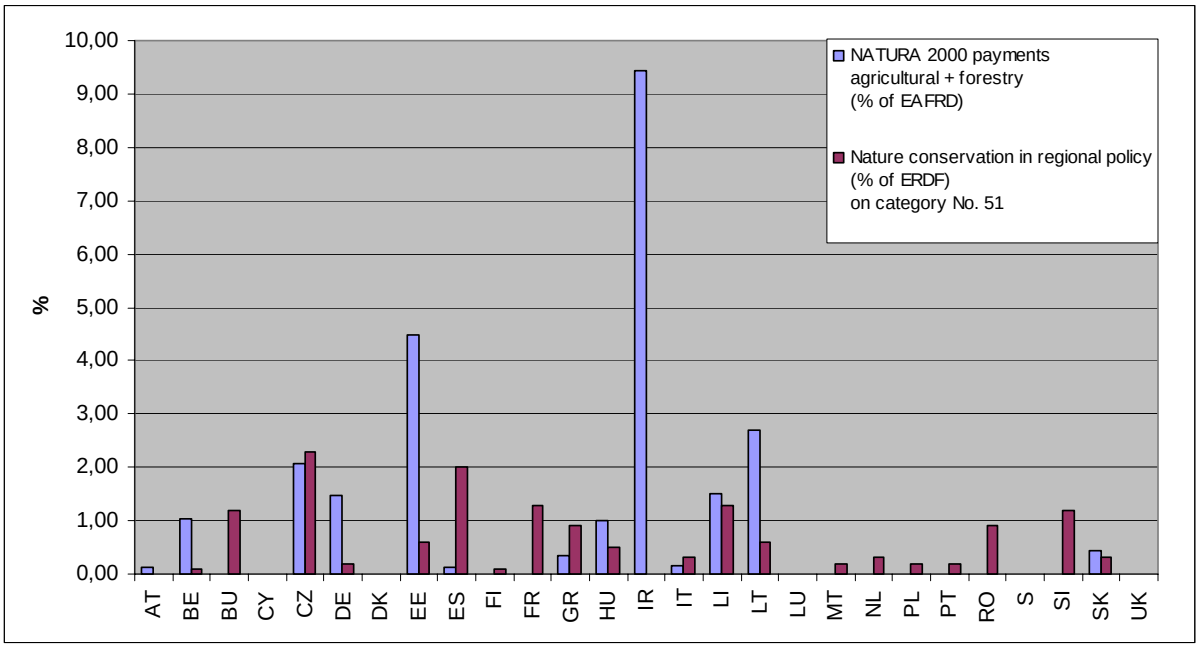


Figure 20: The comparison of allocation on direct measures for Natura 2000 and biodiversity from rural and regional development funds (state of October 2008).

As comparing the expenditure on a wider range of rural and regional development measures that promote Natura 2000 and biodiversity it is to be seen that some countries have higher allocations on the target on this scale. Agri-environmental, forest-environmental and both Natura 2000 payments (agricultural and forestry land) were taken into account of the rural development expenditure and categories No. 51 and 55 of the regional development fund for this analysis (see Table 5). We can conclude that there are some Member States with low allocations from wide-ranged rural and regional development funds (e.g. Luxemburg, Poland, Slovakia) but they are not automatically the same as those of direct measures. Only a few countries have high allocations from both funds when taking indirect measures into account (e.g. Belgium, Czech Republic) from which only the latter one has high allocations on direct measures as well. A change in countries spending more from one of the funds but not from the other is also to be seen (e.g. Austria, Malta, Spain, Sweden, United Kingdom).

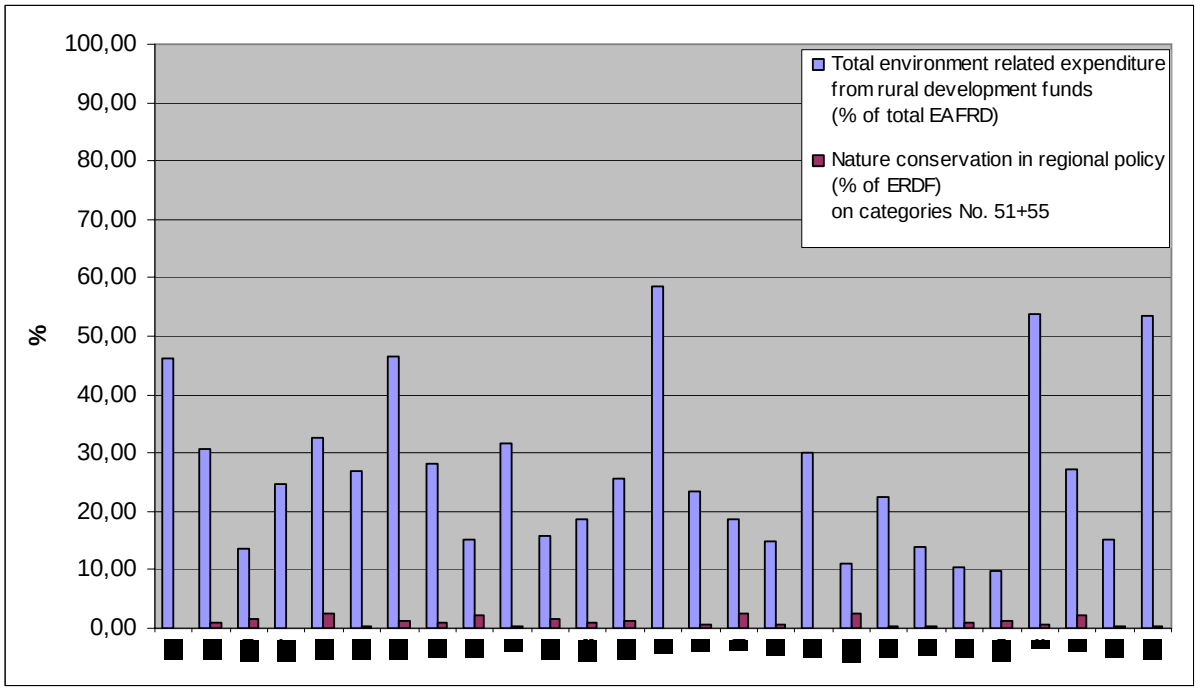


Figure 21: The comparison of allocation on direct and indirect measures for Natura 2000 and biodiversity from rural and regional development funds (state of October 2008).

As the financial information provided by the European Fisheries Fund Operational Programmes does not include the amount allocated to certain measures or operations, it is not possible to separate Natura 2000 and biodiversity related expenditure from other environmental measures. The only available information concerns the total allocation of the EFF plus the national public contribution for each Priority Axis, and the total annual commitment of the EFF in the operational programme.

The estimation of the overall Natura 2000 costs date back to 2003 and indicate EUR 6 100 million per year. The calculation is based is on a questionnaire survey answered by only 8 Member States and data extrapolated to EU 25. As the 2007 EU enlargement took place the Commission has launched a project with a clear aim to provide up-to-date and more accurate data on the financial needs for Natura 2000 network. The project was commenced in 2007 and presumes to provide results by the end of 2008. The effort is made to develop a comprehensive and understandable format of questionnaire that will be circulated within the Member States. Analysis and final conclusions drawn from the data obtained are likely to be available in spring 2009.

Nature conservation projects and Research

Major instrument of the European Commission to support environment related projects across Europe is LIFE funds a part of which is used to support the development of nature, biodiversity and especially Natura 2000. LIFE+ took into force for the 2007-2013 EU budget period with an increased allocation for 2007 (EUR 187 million). The decision on 2007 project proposals has not been made. The share of the yearly LIFE Nature expenditure and allocation on nature and biodiversity related projects from LIFE+ is seen in Table 10.

(For more information see Objective 1, Target A1.1.)

	2000	2002	2003	2004	2005	2006	2007[1]
Austria	7.79	1.60	6.02	7.84	6.77	3.39	1.88
Belgium	2.97	5.30	14.71	2.00	15.67	14.22	2.06
Bulgaria	0.00	0.00	0.00	0.00	0.00	0.00	2.15
Cyprus	0.00	0.00	0.00	2.02	0.00	0.00	1.07
Czech Republic	0.00	0.00	0.00	0.54	0.00	1.00	1.98
Denmark	2.81	6.41	0.00	5.37	14.06	4.39	2.46
Estonia	1.55	1.53	1.00	1.55	0.00	0.00	1.66
Finland	5.45	6.19	6.39	1.15	2.39	3.65	3.58
France	7.74	1.20	7.91	11.03	3.93	3.72	8.75
Germany	12.71	9.19	10.77	6.01	15.70	7.58	11.64
Greece	3.86	9.43	4.24	2.99	1.36	0.00	3.40
Hungary	0.32	3.17	0.90	5.02	2.08	6.23	2.50
Ireland	0.92	4.39	2.25	4.67	1.89	0.00	1.57
Italy	12.61	4.35	11.24	14.35	3.22	4.76	8.80
Latvia	1.47	4.39	3.94	3.00	2.25	1.16	1.34
Lithuania	0.00	0.00	0.00	0.00	2.14	0.00	1.38
Luxemburg	0.00	0.00	0.00	0.00	1.64	0.00	1.09
Malta	0.00	0.00	0.00	0.00	0.00	0.66	1.15
Netherlands	1.70	1.82	0.00	6.47	2.73	13.06	3.21
Poland	0.00	0.00	0.00	0.90	5.92	2.28	4.74
Portugal	3.09	3.84	5.64	2.40	0.00	5.46	2.80
Romania	1.30	0.98	0.98	1.45	3.75	1.10	4.35
Slovakia	0.00	0.00	1.47	0.33	2.62	2.48	1.53*****
Slovenia	1.02	1.13	1.36	1.71	0.00	3.29	2.15
Spain	16.90	15.90	15.42	12.69	4.74	16.99	10.71
Sweden	2.45	5.06	2.87	1.38	2.99	0.54	4.11
United Kingdom	13.34	14.14	2.90	5.12	4.16	4.03	7.95

Table 10: The allocation of LIFE Nature and LIFE+ expenditure between Member States (% of total yearly budget)

[1] indicative allocation for Member States for LIFE+
* Note that Slovakia did not receive 100% of its allocation, as it only got one LIFE+ Nature project with an EC contribution of 2.288.839 €
Source: DG Environment, E4

Framework Programmes (FP) are aimed to provide financial background for research carried out across Europe in different fields, a part of which is allocated to biodiversity projects. Community contribution to environmental research was EUR 58.59 million for FP5 period (1993-1999), EUR 77.48 million for FP6 period (2000-2006) and there has been positive decision made on 9 biodiversity related projects in the frame of FP7 (period 2007-2013) with a total Community contribution of EUR 29.62 million.

Based on the Member States responses and data available it is hard to estimate the Member States' national expenditure on biodiversity related projects and research excluding the part of national public contribution to projects run from any type of European funds. The highest spending for biodiversity research is done by Sweden, followed by the United Kingdom and then Belgium and Malta equally. Interestingly, in some cases the indicated spending is not in correlation with the size or economic strength of the Member State, e.g. Malta is ranking as

third spending more money on research as France or the Netherlands. (For further information see Objective 10, Target A10.1.)

Supporting implementation of Multilateral Environmental Agreements and Bilateral Assistance

The Commission will, by the end of 2008, draft a Communication on the Integration of Cross-Cutting Issues in Development Cooperation. As part of this process, the Commission is preparing a strategy (staff working paper) on the integration of environment in development cooperation. For further information see Objective 7., Target A7.3.

Data on 2007 expenditure is available from all Member States for the following Multilateral Environmental Agreements: Convention on Biological Diversity (CBD), Ramsar Convention, Convention on Migratory Species, AEWA (African-Eurasian Waterbird Agreement), UNESCO World Heritage Convention (WHC) and UNEP Programme of Work (PoW).

The most resources were spent on CBD related work (EUR 2 730 922), while the least significant for AEWA (EUR 546 901). With regards to CBD Italy has allocated the most resources (EUR 1 052 267), and Estonia the least (EUR 871). Biodiversity-related aid is defined as activities that promote at least one of the three objectives of the CBD: the conservation of biodiversity, sustainable use of its components (ecosystems, species or genetic resources), or fair and equitable sharing of the benefits of the utilisation of genetic resources. The total allocation for external assistance is EUR 201.47 million to which Denmark is the biggest contributor EUR 47.1 million and Ireland has no finance indicated for this purpose. Policy objectives are reported by donors through "markers" which do not allow exact quantification of aid activities' contribution to the objectives. Thus, the figures are approximate. Biodiversity spending data are derived from the OECD Creditor Reporting System database where members of the Development Assistance Committee and multilateral donors report their aid activities. (Data are available online at www.oecd.org/dac/stats/crs) Germany spent the most on Ramsar (EUR 205 790) and the three Baltic States spent the least (each EUR 599). Estonia has not indicated any spending for CMS while the UK mobilised the most resources (EUR 265 576). With regards to AEWA Austria, Luxembourg, Malta and Poland has not indicated spending, while France, Germany and the UK allocations were the highest (EUR 96.213). For WHC Germany used the most resources (183.023 EUR) and Malta the least (42 EUR).

UNEP PoW received the most contribution from the Netherlands (EUR 7 084 269) and from Bulgaria the least (EUR 4 962). (For further information see Objective 7, Target A7.2.)

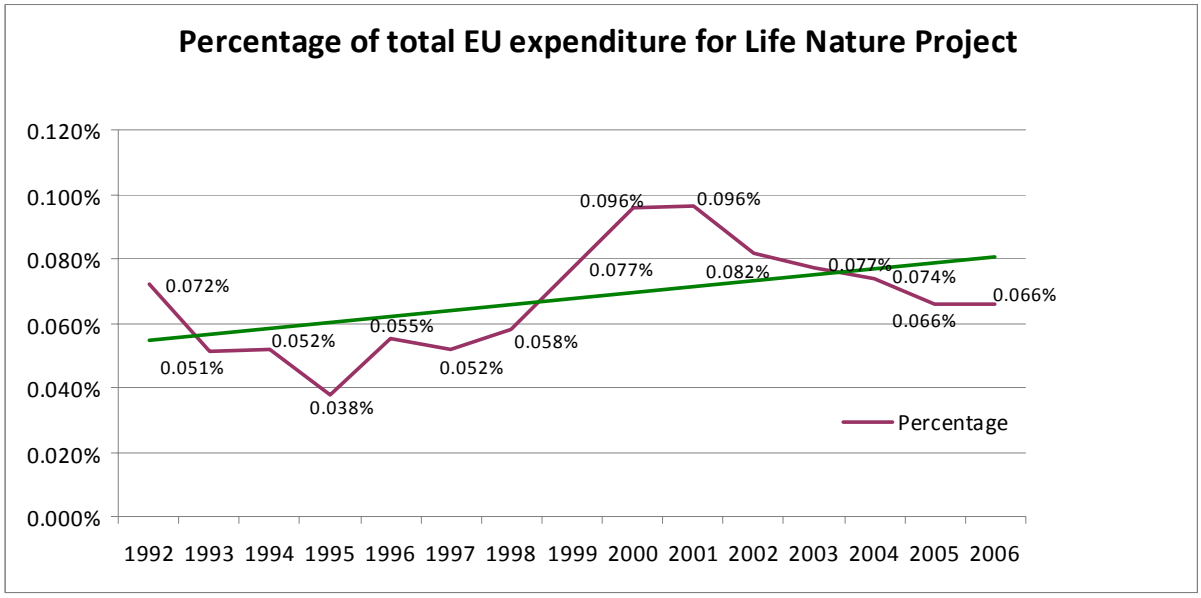


Figure 22: Percentage of total EU expenditure for Life Nature Project

Supporting Measure 2. Strengthening EU decision–making for biodiversity

A. Context

Strengthening EU decision-making involves improving coordination and complementarity between Community and Member States, notably through an efficient governance structure; ensuring existing and new policies and budgets (including those developed under Lisbon Strategy National Reform Programmes) take due account of biodiversity needs; taking account of environmental costs (including loss of natural capital and ecosystem services) in decision–making; improving coherence at national level between various plans and programmes affecting biodiversity; and ensuring decision–making at regional and local level is consistent with high–level commitments for biodiversity.

B. Progress assessment

Target 2.1 EU vision on biodiversity and ecosystem services agreed and providing policy framework by 2010

Millennium Ecosystem Assessment (MA)

As part of the Potsdam initiative agreed by G8 in 2007, a study on The Economics of Ecosystems and Biodiversity (TEEB) has been jointly initiated by the European Commission and Germany in collaboration with the European Environment Agency. The first results of this assessment of the global economic benefit of biological diversity, the costs of the loss of biodiversity and the failure to take protective measures versus the costs of effective conservation have been presented at CBD COP9 in May 2008.

The Commission is also supporting the development of a sub-global assessment (SGA) for Europe, in the context of UNEP´s Millennium Ecosystem Assessment Follow-up Strategy. According to the FP7 road map covering the research priorities for the next calls, there will be a call for research proposals that will adapt and apply concepts and methods of the Millennium Ecosystem Assessment, integrating all-taxa biodiversity inventories on key ecosystems, to assess conditions of European ecosystem services. This will be properly integrated with the work and results of the EEA's EURECA project. Research effort will be focused over the course of FP7 on making human use of biodiversity sustainable. As part of this, research support will be provided to follow up TEEB, with work on economic, social and environmental costs and benefits of conservation and use of biodiversity. Other recommendations for research in this direction will be taken into consideration, including those identified by the European Platform for Biodiversity Research Strategy (EPBRS).

Six Member States (Belgium, Cyprus, Czech Republic, France, Germany, Hungary) have plans to follow up the Millennium Ecosystem Assessment, 10 Member States do not (Austria, Bulgaria, Denmark, Estonia, Ireland, Latvia, Netherlands, Romania, Sweden, UK) while the other Member States did not respond to this aspect.

Target 2.2 New policies benefit biodiversity and ecosystem services, and their negative impact on biodiversity and ecosystem services prevented or minimised, from 2006 onwards

An assessment by the Commission in January 2006 showed that two thirds of the Member States refer to biodiversity or nature protection in their National Reform Programmes. Some of them consider biodiversity a particularly crucial resource due to the important economic contribution from nature tourism. However, a further assessment in December 2006 showed that while on biodiversity important progress is reported by many countries, additional integrated policy efforts are needed.

As part of its policy on Better the Commission is screening all new legislative and policy proposals for potential significant impacts on biodiversity. The impact assessment guidelines, used by the Commission include biodiversity concerns.

Target 2.3 Biodiversity needs have been better integrated, as necessary, [into post-2013 Financial Perspectives and any mid-term review of FP 2007-2013]

The mid term review of the EC 6th Environment Action Programme carried out in 2007 confirmed that biodiversity is one of the four priority areas. The 2007 Environment Policy Review showed that the year 2007 was a turning point in EU environment policy. The main commitments under the 6th Environment Action Programme have been delivered and environment issues were firmly at the top of the political agenda. But there are also reasons for concern. While the policy framework is in place, implementation of EU environment legislation by Member States is often slow or incomplete. Furthermore, the EU needs to prepare for the major environmental challenges ahead: defining a long-term strategic vision for sustainable consumption and production, adaptation to the inevitable climatic changes, and the protection of biodiversity. The accompanying Commission Staff Working Paper provides more factual details, including some key indicators of trends in the different priority areas of the 6th Environment Action Programme, as well as an overview of 2007 environment policy initiatives in all 27 Member States.

Target 2.4 Complementarity of EC and Member States biodiversity strategies and action plans substantially enhanced by 2010

Alignment of national biodiversity strategies with EU (B2.2)

Ten Member States (Austria, Belgium, Czech Republic, Germany, Denmark, Finland, Netherlands, Sweden, Slovenia and UK) have environmental policy or strategy created or updated in light of the Communication 'Halting the loss of biodiversity by 2010 and beyond', four are currently developing it (Greece, Spain, Ireland, Malta), seven have not (Cyprus, France, Hungary, Lithuania, Latvia, Poland, Portugal) and six failed to respond to this question (Bulgaria, Estonia, Italy, Luxembourg, Romania, Slovakia).

EU governance structure

There have been discussions on improving the governance structure for implementation of EU nature and biodiversity policy, with particular regard to delivery of the EU Biodiversity Action Plan. This has led to the creation of a new Co-ordination Group on Biodiversity and

Nature, involving the competent authorities of the Member States, different Commission services and representatives of key stakeholder groups.

Target 2.5 Effective integration of Natura 2000, rural development, river basin management and other territorial plans and programmes in support of biodiversity achieved by 2010

Nearly all Member States effectively use Rural Development Programmes in support of biodiversity, only Italy and Spain did not respond to this question. It appears that nearly all Member States integrate effectively Natura 2000 plans and programmes in support of biodiversity except Romania, Spain and Sweden, which did not respond to this question.

Fourteen Member States (Cyprus, Czech Republic, Finland, Germany, Greece, Ireland, Latvia, Lithuania, Netherlands, Portugal, Romania, Spain, Sweden, UK) effectively integrate River Basin Management plans and programmes in support of biodiversity, one does not (Bulgaria) and 11 did not respond to this question (Austria, Belgium, Denmark, France, Hungary, Italy, Luxembourg, Malta, Poland, Slovakia, Slovenia).

The Commission has included biodiversity concerns and targets in its assessment of the National Strategies submitted by Member States in the context of the EC Cohesion policy (Structural and Cohesion funds) for the financing period 2007-2013. Rural Development programmes are also being monitored and assessed.

The Commission has started an initiative aimed at developing new concepts for the integration of the Natura 2000 network into the broader countryside. Under this activity a new spatial vision for a green structure of the European Union will be elaborated, ensuring sustainable management of natural resources, adaptation to accelerated climate change and the maintenance of biodiversity.

Target 2.6 Substantial improvements in compliance with environmental regulations by 2010 [and again by 20132]

The Commission continues to closely monitor the implementation of environmental legislation and to take the necessary action to ensure that Member States comply with it. For examples general conformity studies for all EU 25 MS have been carried out for both Birds and Habitats Directive and where gaps in transposition appear the Commission has initiated non-conformity cases. As regards the Birds Directive, infringement procedures related to non-conformity issues are ongoing against 15 Members States[79]. As regards the Habitats Directive infringement procedures related to non-conformity issues are ongoing against 16 Member States[80].

The European Commission has started a consultation exercise on its initiative to reform the control system of the Common Fisheries Policy (CFP). Continued failure of the control policy would have serious consequences for the future of fisheries resources and on conservation efforts. In February 2008, the Commission has therefore launched a public consultation on how CFP control should be improved and strengthened to make it fit to deliver the core goals

[79] AT, IE, ES, DK, UK, EL, IT, CZ, EE, HU, LT, LV, PL, SK, RO.
[80] (AT, DE, UK, FR, IE, ES, DK, NL, EL, CZ, EE, MT, PL, SI, SK, HU).

of the Common Fisheries Policy, namely, a genuinely sustainable European fishing industry. A meeting with stakeholders will be held by the end of April 2008. The consultation exercise will lead to a proposal for a new Council regulation in October. This will replace the existing one which dates back to 1993.

The Joint Deployment Plan (JDP) was launched in March this year by the Commission. This major EU control campaign will be coordinated by the Community Fisheries Control Agency (CFCA) and marks the EU's determination to ensure that the fifteen-year recovery plan for the blue fin tuna, agreed within the International Commission for the Conservation of Atlantic Tuna (ICCAT) in November 2006, is fully respected. The JDP brings together the resources of the seven main Member States involved in the fishery and will cover all stages in the market chain, including controls at sea, onshore and at fattening farms.

Supporting Measure 3. Building partnerships

A. Context

This supporting measure involves building progressive partnerships between government, academia, conservation practitioners, landowners and users, private sector, finance sector, educational sector and the media to frame solutions. It involves building on existing provisions (e.g. under the CAP and CFP) and the development of new partnerships, including outside the EU.

B. Progress assessment

Target 3.1 Key stakeholder groups actively engaged in conservation of biodiversity from 2006 in each Member State

Work on developing an EU Business & Biodiversity initiative has involved consultations with businesses, NGOs and Member States. Business and Biodiversity was one of environmental priorities of the Portuguese Presidency during the second half of 2007 and a major conference on this subject, organised by the Presidency, took place in Lisbon on 12-13 November 2007 (see http://countdown2010.net/business). The Message from Lisbon, a consensus document from over 400 conference participants, half of them representing businesses, stressed the importance of engaging business in meeting the 2010 target, underlined the need for concerted action at the EU level. Building on the experience of the Lisbon conference the Commission intends to establish and put into operation an EU Business and Biodiversity technical support platform.

An ongoing EU funded pilot study establishing biodiversity technical assistance units in three selected new Member States (Bulgaria, Hungary & Poland) aims to facilitate the creation of a new pro-biodiversity investment markets for businesses, especially small and medium enterprises (SMEs) and the banking sector, with a view to helping prepare bankable projects for future investment loans.

In 2008 the Commission has launched some initiatives aiming at the development and rewarding of Partnerships in the context of the management of the Natura 2000 network. The first initiative includes the establishment of a web-based 'Natura 2000 communication platform'. This will allow different socio-economic sectors to become actively involved on their own initiative in the exchange of good practice and the preparation of sector-specific guidance and recommendations for good conduct. The second initiative is the development of a 'Natura 2000 Partner Reward Scheme'. This will reward individuals, organizations and public institutions that show particular merit in promoting the management of and the communication on Natura 2000. Both initiatives are well under way, and the launch of the instruments is expected in 2009.

The Commission services have invited specific sectors to cooperate with the Commission to produce guidance for practitioners on how to address problems associated with Natura 2000 sites. The stakeholders interested in non-energy extractive industries, the representatives of ports and coastal management bodies with a special interest in estuaries and coastal zone

management, and representatives of wind energy industry are participating in working groups which will produce guidance documents for these topics in 2009. Member State, NGOs and other stakeholders are also involved in these initiatives.

National partnerships for biodiversity including private sector involvement (B3.1):

Amongst the actions identified in the Biodiversity Action Plan, supporting measure 3.1.6 requires that Member States facilitate business and biodiversity partnerships from 2006 onwards. The BAP Member State Questionnaire specifically addressed this action point. Twenty Member States (74%) indicated that they had national initiatives aimed at promoting partnerships for biodiversity. The distribution of partnerships by business sector is indicated in Table 6, introduced under Target 4.4. The most common partnerships related to the farming and tourism sectors (13 of the 20 countries in each case). Three Member States (Spain, Romania and Sweden) do not yet have initiatives promoting biodiversity partnerships, whilst no information was provided by four Member States (Italy, Luxembourg, Malta and Portugal (national initiative known to have been launched). Of the high number of Member States with partnership initiatives, to date 48% have developed at least some sectoral guidance documents relating to biodiversity. Only 4% have not, but nearly half (48%) did not supply this information. (Figure 23 and Figure 25) In contrast only 19% have developed national or sub-national recognition or award schemes that promote business engagement with biodiversity (Belgium; Cyprus; Latvia; Slovenia; United Kingdom), 33% have no such scheme and 48% failed to provide this information (Figure 26).

The number of partnership initiatives related to Natura 2000 was substantially less than those for biodiversity as a whole and in 48% of cases the information was not known (AT; EE; EL; ES; FI; IE; IT; LU; LV; MT; PL; PT; SI). Five Member States indicated that they did not have initiatives to promote partnership with Natura 2000 (CY; CZ; DK; RO; SE), and to date only nine Member States do have such initiatives (BE; BG; DE; FR; HU; LT; NL; SK; UK) (Figure 24).

Data Source: Country Profiles and Member state Questionnaires.

The Commission will also promote greater engagement of the hunting community in the implementation of the Birds directive and the Habitats Directives and to further engage the community of wildlife recreational users in conservation and management of Natura 2000, including the angling community, with particular attention to the beneficial consequences that these activities bring for Natura 2000.

Target 3.1 Key stakeholder groups actively engaged in conservation of biodiversity from 2006 in each Member State

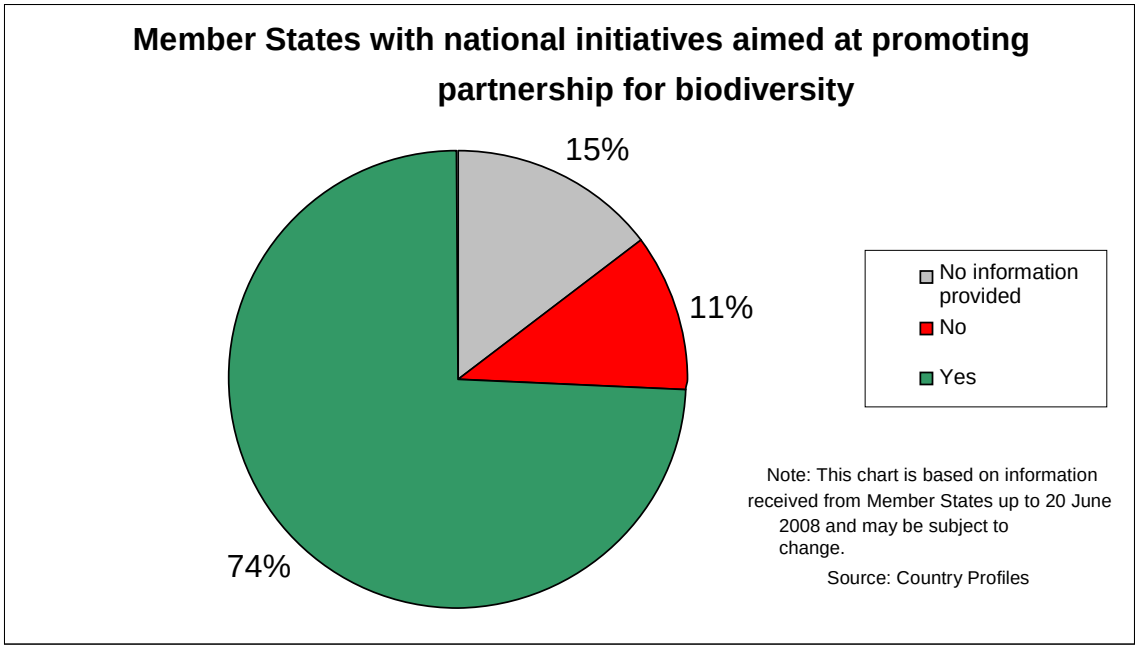


Figure 23: Distribution of Member States as regards national partnerships for biodiversity including private sector involvement (B3.1)
(based on information received from the Member States up to 20 June, 2008. Source: Country Profile)

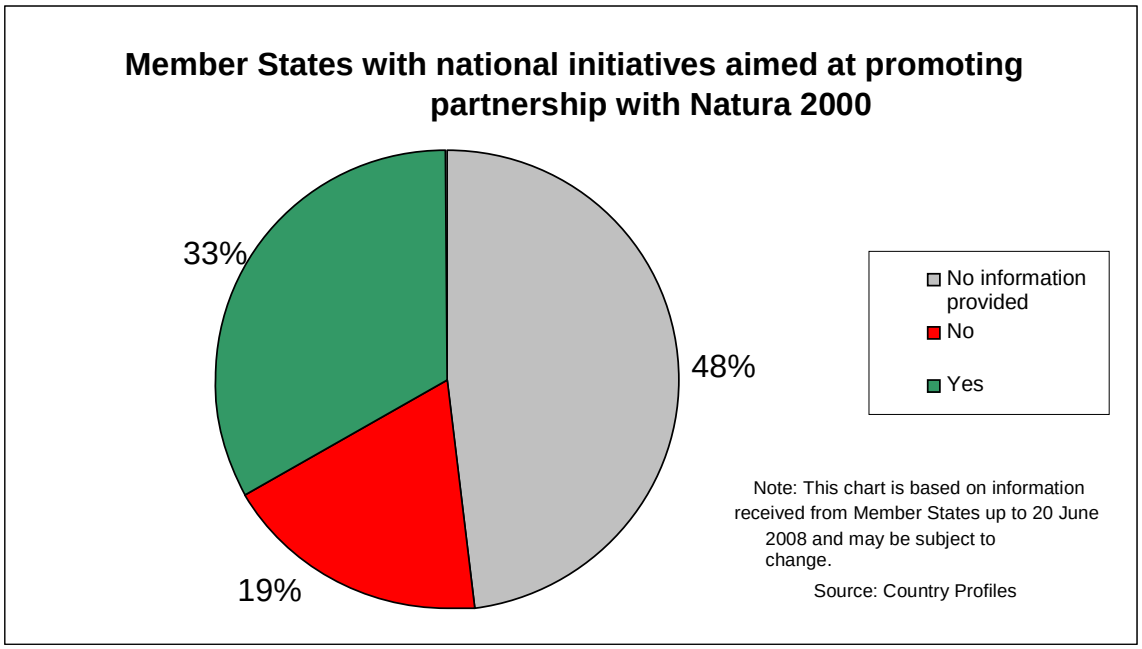


Figure 24: Distribution of Member States as regards national partnerships with Natura 2000
(based on information received from the Member States up to 20 June, 2008. Source: Country Profile)

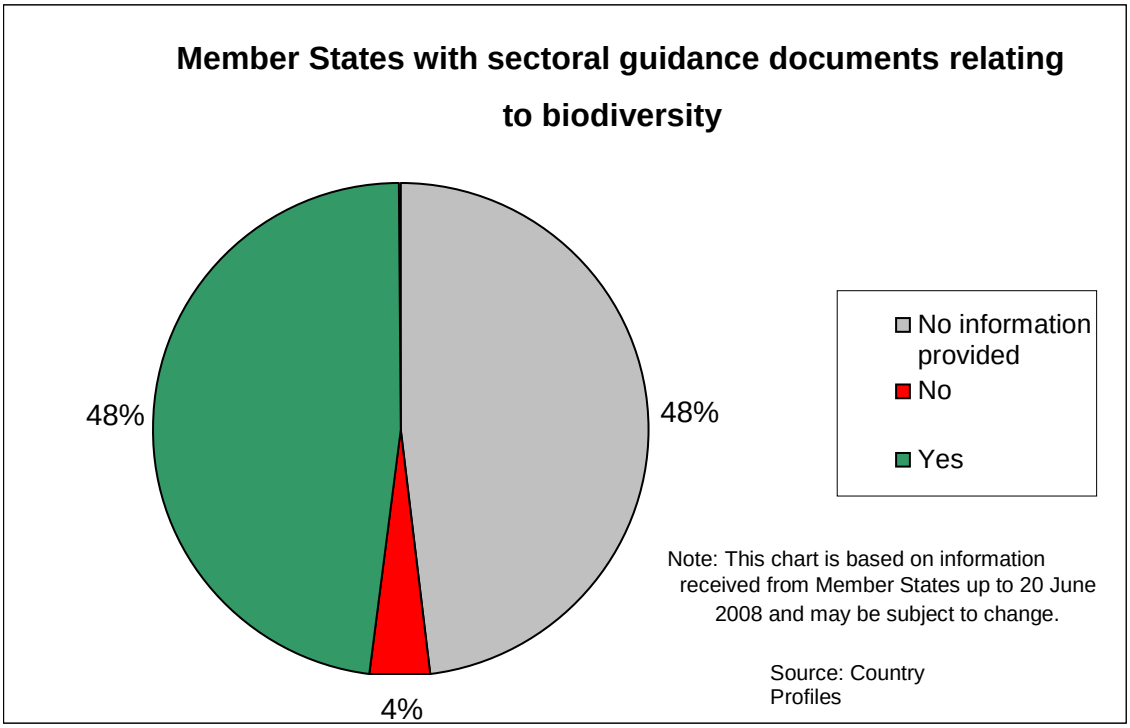


Figure 25: Distribution of Member States as regards sectoral guidance documents related to biodiversity
(based on information received from the Member States up to 20 June, 2008. Source: Country Profile)

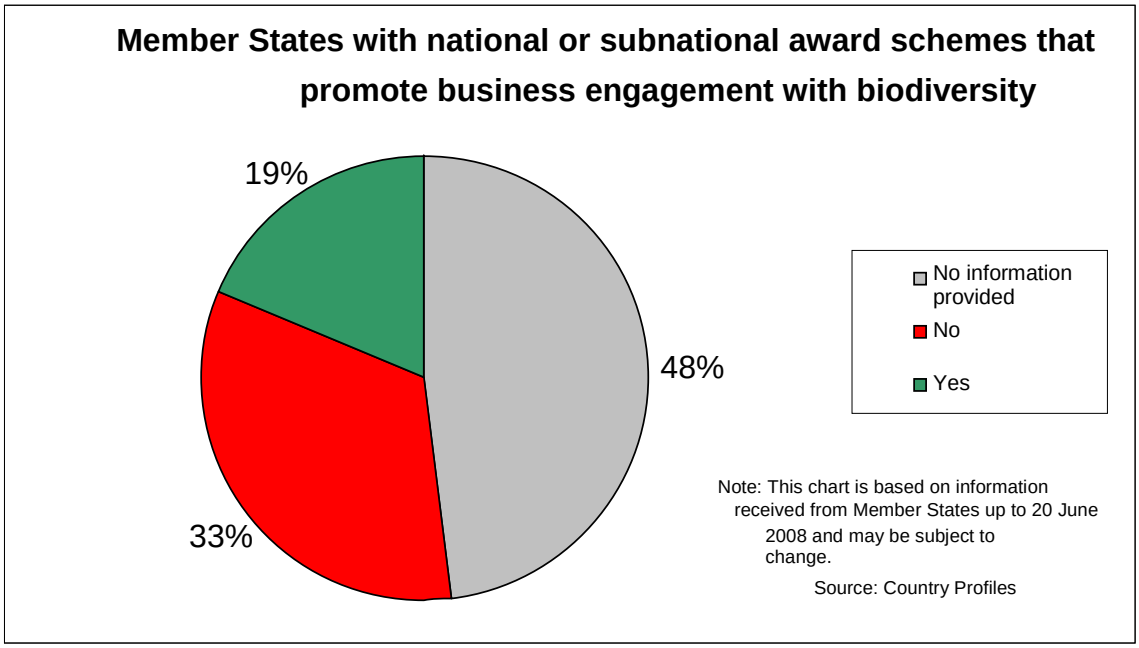


Figure 26: Distribution of Member States as regards national or subnational award schemes that promote business engagement with biodiversity
(based on information received from the Member States up to 20 June, 2008. Source: Country Profile)

Supporting Measure 4. Building public education, awareness and participation

A. Context

The 2010 target of halting biodiversity loss can only be met if all sectors of society – from public authorities and industry to private landowners and individual members of the general public - are actively involved. First step for the general public is information and understanding of biodiversity and our dependence on its ecosystems' goods and services, and next steps are awareness raising about the threats to biodiversity and what the public can do to contribute to halting the loss.

B. Progress assessment

Target 4.1 10 million Europeans actively engaged in biodiversity conservation by 2010, [15 million by 2013]

National/Sub-national public awareness campaigns/initiatives

A Flash Eurobarometer[81] opinion poll on the attitudes of Europeans towards the issue of biodiversity, based on a survey of over 25,000 people in all Member States, was published in January 2008.

Whilst a majority of Europeans have heard of the term biodiversity (65%) only 35% of people know what the term means, let alone understand what the threats and challenges to its conservation are. Differences in the level of awareness vary across Europe, and countries that have a poor knowledge of biodiversity (60% of people or more having never heard of biodiversity) include The Czech Republic, Cyprus, Denmark, Greece, and Slovakia (See SEBI indicator 26 annexed). This may extend from the general public to policy makers. Awareness raising was considered to be a key issue that needed to be addressed as a matter of some urgency in the Czech Republic in an assessment by UNEP-WCMC in 2000 due to the reported lack of awareness of biodiversity conservation issues among decision-makers.

[81] Flash Eurobarometer 219: The Attitudes of Europeans towards the Issue of Biodiversity, http://ec.europa.eu/public_opinion/archives/flash_arch_en.htm

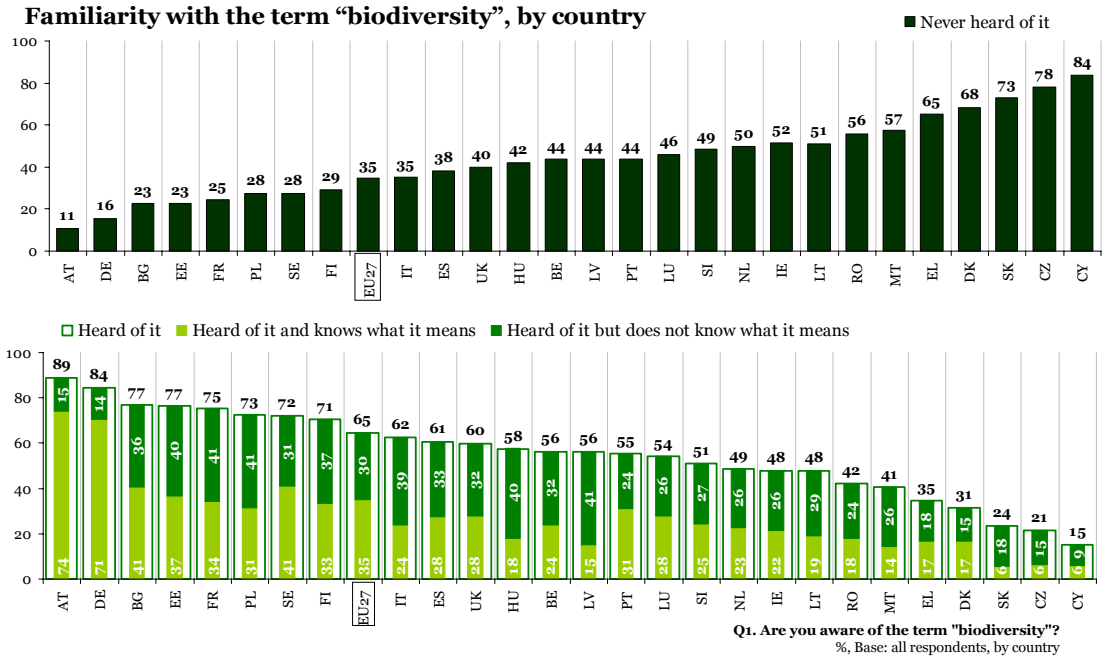


Figure 27 (source: Flash Eurobarometer 219: "Attitudes of Europeans towards the issue of biodiversity", The Gallup Organization)

Most EU citizens are also unaware of the Natura 2000 network and 80 % have never heard of it; only 6% know what Natura 2000 means.

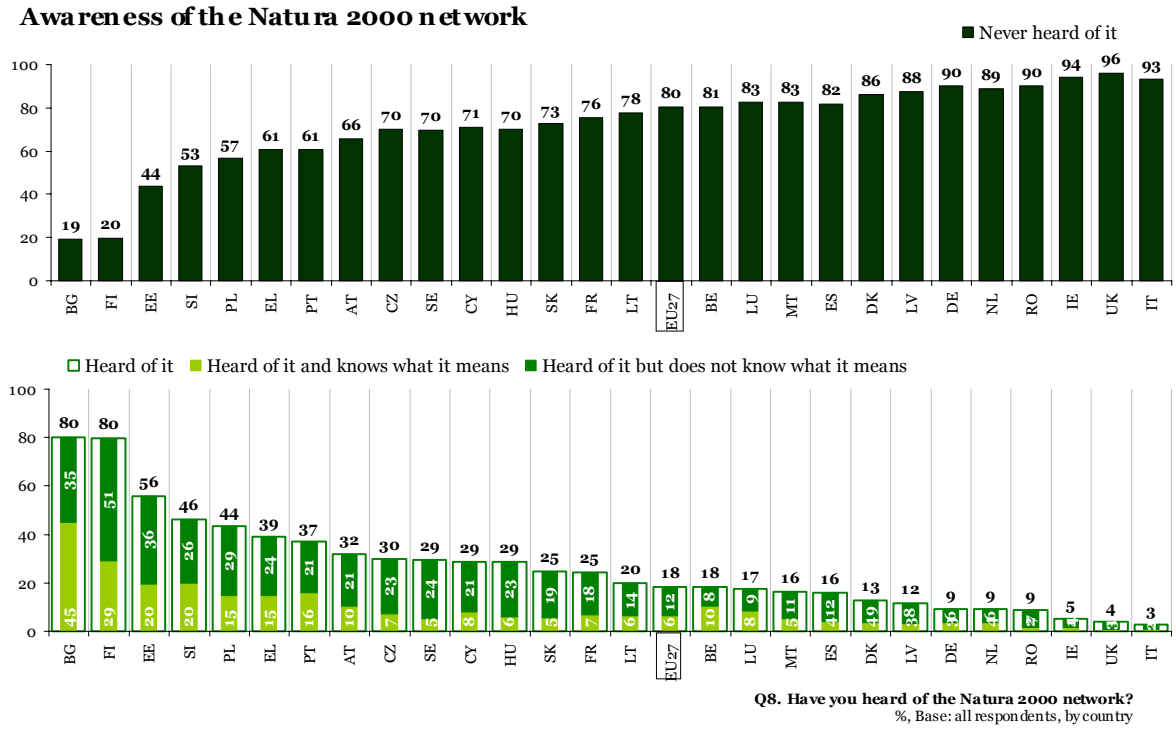


Figure 28 (source: Flash Eurobarometer 219: "Attitudes of Europeans towards the issue of biodiversity", The Gallup Organization)

Even though few EU citizens feel well informed about biodiversity, over two thirds consider the loss of biodiversity a serious problem, when the issue is explained to them. Over two thirds of EU citizens are personally making efforts to help preserve biodiversity.

The BAP requires Member States to develop and implement a communications campaign in partnership with the Commission to support the implementation of the Action Plan and raise awareness about biodiversity. Information available in individual Country Summaries indicates a range of approaches to raising public awareness from educational activities through to policy initiatives. For example, the Action Plan for Biodiversity and Nature Protection in Denmark 2004-2009 includes such provisions, and reference is also made to the Aarhus Convention, indicated under Action B4.1.3 in the Action Plan.

Belgium's and Slovenia's National Biodiversity Strategies include an objective to involve the community in the strategy through communication, education, public awareness and training. Others are in the process of preparing plans: According to the Third National Report to the Convention of Biological Diversity, Greece is preparing a communication, education and public awareness (CEPA) strategy relating to the commitments to the Aarhus Convention.

A scoping study for an EU wide Communications Campaign aimed at creating awareness about and support for the 2010 target and the long-term protection of biodiversity was published in March 2008. Recommendations from this study, including campaign objectives, key messages, target audience, framework and components of a communications campaign, fed into the 2008 call for proposals of the Information & Communication component of the LIFE+ financial instrument. Under this heading priority is being given to proposals relating to the protection of nature and biodiversity. A common visual identity for communication campaigns on nature and biodiversity will be developed and the Commission is also considering priority actions at EU level.

The Commission has produced an informative guide and related posters on the EU Biodiversity Action Plan. A book celebrating the Natura 2000 network was launched in May 2008, describing 80 of the finest Natura 2000 sites. Information material on Natura 2000 is being updated and translated and new material produced, to improve outreach to create awareness, understanding and support for the key legislation, the Nature Directives, and the Natura 2000 network. EU support for the Countdown 2010 Initiative will continue in 2008 and 2009 to assist a range of activities including events under EU Presidencies, with regions and local authorities and with the European Parliament.

C. MONITORING, EVALUATION AND REVIEW

ANNUAL REPORTING, INDICATORS, MONITORING

A. Context

There has been continuing progress with the pan-European initiative for Streamlining European 2010 Biodiversity Indicators (SEBI 2010), aimed at assessing, reporting on and communicating progress towards the 2010 target in Europe. Using a common methodological framework, endorsed within the framework of the Convention on Biological Diversity, a set of 26 pan-European biodiversity indicators has been selected with the financial support of the European Commission, the European Environment Agency, and UNEP.

The Farmland bird index was selected as a structural indicator in 2004, as a headline sustainable development indicator in 2005 and as agri-environmental indicator in 2006.

Work is in progress to develop coordinated monitoring approaches and tools, and to streamline and modernise the reporting tasks under the Habitats[82] and Birds[83] directives, including the dataflow on the Natura 2000 network.

B. Progress assessment

Target 1.1 Annual, Mid-Term and Final Reports submitted in timely fashion to Council and Parliament

The Commission published its first report on progress in implementation of the Action Plan, starting with the period from adoption of this Communication to end 2007 in December 2007. The second report (to end 2008) includes a concise mid–term evaluation of progress towards the 2010 targets based on the headline set of SEBI 2010 indicators, and assessment of progress in implementation at Community and Member States level and will be submitted to Council and Parliament.

The EC and EEA together with the Secretariat of the Convention on Biological Diversity and UNEP-World Conservation Monitoring Center (WCMC) are actively involved in the improvement of the alignment and synchronisation of biodiversity reporting based on a streamlined set of indicators (e.g. 4th Convention on Biological Diversity National Report – 4NR, 3rd Global Biodiversity Outlook - GBO3, global Biodiversity Indicator Partnership - BIP). This includes the development of the European Common Database on Designated Areas- the so called ECDDA, where efforts are being joined with the Council of Europe in sharing procedures for the information included.

---

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

83 Council Directive 79/409/EEC on the conservation of wild birds, OJ L 103, 25.4.1979, p. 1.

Target 1.2 Indicators in place and informing policy-decisions by 2010

Using the common methodological framework for goals, targets and indicators endorsed by COP decision VII/30, a set of 26 pan-European biodiversity indicators has been selected with the financial support of the European Commission, the European Environment Agency, and UNEP (see Annex 4) and is fully documented in the EEA Technical Report[84] on Streamlining European biodiversity indicators (SEBI) 2010 of October 2007. This provides the basis - to be complemented by other sets of indicators, especially those designed to assess progress in policy sectors - for a first European indicator-based assessment of progress towards the 2010 biodiversity target to be published by the EEA in the first half of 2009. It will be part of the European contribution to the 4th Convention on Biological Diversity National Report (4NR) according to the guidelines endorsed by COP decision VIII/14.

Based on available information, more than half of Member States (16) already have national biodiversity indicators; some countries (Belgium, the Netherlands, and the UK) have aligned their indicators to the SEBI framework. Thirteen Member States have some indicators that correspond with the SEBI indicator framework, with gaps mainly on invasive species, occurrence of temperature-sensitive species, sustainable use, threats to biodiversity, resource transfer, access and benefit-sharing and public awareness. It is very encouraging that the development of national indicators aligned to the SEBI indicator framework is underway in the Member States.

Two regional capacity-building workshops have been organised for 6 countries of South Eastern Europe and 12 countries of the ECCA region. An international workshop on biodiversity indicators was organised back-to-back to SBSTTA 12 in July 2007 in collaboration with the UNEP-WCMC global Biodiversity Indicator Partnership.

Further refinement and improvement of the SEBI 2010 indicators is ongoing, including with regard to the impact of climate change on biodiversity, interlinkages and communications. Response indicators have been collected by the European Commission in 2008 to support the assessment of progress in meeting, or contributing to, the relevant objectives and targets of the Biodiversity Action Plan. Indicators used in the context of "The Economics of Ecosystems and Biodiversity" (TEEB), such as the Mean Species abundance and other indicators such as the Net Landscape Ecological Potential may be evaluated for their inclusion in other assessment reports or the SEBI 2010 set.

Following Council's request of 2003 to develop an 'EU Biodiversity indicator', possible options (e.g. birds, butterflies, Red List Index, Living Planet Index) have been evaluated by the European Topic Centre on Biological Diversity last year. On this basis and depending on the outcomes of the nearly finalized INDI-link[85] project, a proposal of options with strengths and weaknesses, and costs of production will be provided by the European Environment Agency for further discussion. This will also contribute to 'Beyond GDP' initiative launched last year, which will lead to the adoption of a Communication later in 2008, and includes the development of an environment composite indicator or index as top-level indicator for the environment to complement GDP in policy debate.

---

84 EEA Technical report n° 11/2007, See http://reports.eea.europa.eu/technical_report_2007_11/en

85 Vačkář David (April 2008) – Conceptual basis for the development of a Biodiversity Index (BDI) and Biodiversity Accounts (BDA). Environment Centre Charles University, Prague.

SEBI 2010 is also contributing to the update, improvement and review of the section on natural resources of the next Sustainable Development Monitoring Report to be published by Eurostat in 2009.

In 2008, SEBI 2010 has been selected by Red Life, a Spanish Journal, as one of the ten best ideas to save nature.

Towards a shared information system for biodiversity

In January 2008, the European Commission has adopted a Communication towards a Shared Environmental Information System (SEIS)[86]. SEIS is a collaborative initiative of the European Commission and the European Environment Agency (EEA) to establish together with the Member States an integrated and shared EU-wide environmental information system, based on technologies such as the internet and satellite systems. It is closely linked to INSPIRE, the environmental geographic data and services portal (see http://www.inspire-geoportal.eu/) and the 'Global Monitoring for Environment and Security' (GMES), which represents a concerted effort to bring data and information providers together with users, so they can better understand each other and make environmental and security-related information available to the people who need it through enhanced or new services (http://www.gmes.info/).

In this framework, the European Commission is currently working on a SEIS legislative proposal, which will provide a legal basis for the new electronic reporting mechanism, focusing especially on information and data currently reported under Community environmental law. This proposal would provide an opportunity for streamlining reporting provisions under the nature directives (e.g. synchronicity, alignment of content and procedures). The streamlining and modernisation of the reporting tasks under the Habitats and Birds directives is being discussed in an Expert Group on Reporting, set up in 2008.

To promote and facilitate access to biodiversity-related information sources world-wide, the EEA is hosting the European Community Biodiversity Clearing House Mechanism and developing links with national mechanism (Belgium, Bulgaria, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Latvia, Netherlands, Poland, Romania, Slovenia, Sweden, UK), existing networks and relevant databases. Discussions are currently taking place on the building up of a regional network on biodiversity information as a tool to dialogue with the civil society, major groups and stakeholders.

Based on available information, 17 Member States (Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden, UK) are members of the Global Biodiversity Information Facility (GBIF), which is an international organisation working to make the world's biodiversity data accessible anywhere in the world. GBIF's members include countries and international organisations who have signed a Memorandum of Understanding that they will share biodiversity data and contribute to the development of increasingly effective mechanisms for making those data available via the Internet.

[86] See http://ec.europa.eu/environment/seis/index.htm

Target 1.3 Monitoring providing adequate data flow for implementation of indicator set, for reporting on favourable conservation status, and for broader assessment of effectiveness of the Action Plan by 2010

The first major 'health check' of the conservation status of species and habitats of Community interest under Article 17 of the Habitats Directive is underway. On the basis of national reports received in 2007/early 2008 the Commission, with support of the European Topic Centre on Biological Diversity of the European Environment Agency, will complete an EU level assessment (as part of the Commission's composite report by mid-2009), enabling a judgment to be made at community level and at Biographic region level of the effectiveness of implementation to date. This information will allow to identify future priorities for specific actions, targeting resources for example on species and habitat identified as particularly threatened. It will also conversely permit an objective assessment to the case for continuing high levels of protection status for species which are shown to be in a very abundant situation. An overview on the national assessments is already available[87]. A national summary of the Article 17 reports has also been prepared for each Member State[88].

Based on available information it appears that numerous biodiversity monitoring programmes and schemes have been developed in the 27 Member States, some of them long-standing ones and others have been established more recently. These programmes cover a wide range of biomes and species. The schemes have a heavy bias towards monitoring population trends in various species groups, including breeding birds, meadow birds, waterbirds, non-nocturnal mammals, bats, amphibians, reptiles, butterflies, dragonflies, lichens, mushrooms (macro-fungi), vascular plants and vegetation types as well as terrestrial, marine and freshwater biomes (for more details see the EUMON, the EU-wide monitoring methods and systems of surveillance for species and habitats of Community interest http://eumon.ckff.si/). Funding for biodiversity monitoring, which substantially lags behind investments made by countries in other environmental issues, needs to be substantially increased to allow for comprehensive future assessments.

As birds are considered to be highly representative of biodiversity and the integrity of ecosystems, a pan-European Common Bird Monitoring Scheme (PECBM) has been set up to produce a common bird indicator (cf. SEBI 01). This harmonised scheme currently covers 18 Member States even if bird monitoring schemes and programmes exist in all 27 EU Member States as shown in **Error! Reference source not found.** on Common bird index of consolidated profile on objective 1.

Many datasets on species are managed by NGOs (including research organisations) rather than national administrations. There is a need to improve access to these data sets and avoid overlap in efforts. The initiative 'The Conservation Commons', started amongst conservation NGOs to support open access to, and in particular the fair use of, data and information related to the conservation of biodiversity is hosted at UNEP-WCMC (see www.conservationcommons.org). Discussions are taking place with the European Community for possible co-operation.

To support harmonisation of monitoring methods for European habitats and species, the Commission is exploring the feasibility to establish a platform for the exchange of

87 http://biodiversity.eionet.europa.eu/article17

88 can be viewed on the CIRCA-Reporting at http://circa.europa.eu/Public/irc/env/monnat/library

information and of good practices within the EU Expert Group on Reporting. The work of the group involves the standardisation, synchronisation and modernisation of dataflow (use of IT-tools) as well as proposals for the presentation of these data & their analysis via the internet in order to be available and relevant to a wide range of users.

Finally, modern monitoring technologies are being developed based on earth observations. As part of its contribution to the Global Earth Observation System of Systems (GEOSS), the European Community is funding under FP7 the European Biodiversity Observation Network (EBONE), a project to design and test a biodiversity observation system integrated in time and space. It is the European contribution to the Group on Earth Observations Biodiversity Observation Network (GEO BON), which is promoting coherence in biodiversity observations with regard to data architecture, scales and standards, observatory network planning and strategic planning for its implementation. By facilitating and linking efforts of countries, international organizations, and individuals, GEO BON will contribute to support the Convention on Biological Diversity. Future work involves the integration, cross-calibration and validation of field data and remote sensing observations for the collection, management, sharing, and analysis of data on the status and trends of the world's biodiversity http://earthobservations.org/cop_bi_geobon.shtml.

The Commission is working with EEA, ESTAT, JRC and DG RTD on strengthening the knowledge base for biodiversity within the framework of the Shared Environmental Information System (SEIS) on developing a common approach for the establishment of a Europe wide biodiversity data centre and assessment facility to inform biodiversity policy. This will be undertaken jointly with Member States.

EVALUATION AND REVIEW

A. Context

The Commission has undertaken in its 2006 Communication on halting the loss of biodiversity by 2010 and beyond[89] to provide annual reporting to assess delivery of the EU biodiversity action plan and to determine progress towards meeting the 2010 target. A first progress evaluation, covered the period up to the end of 2007 and focusing on action at Community level, was finalised in January 2008[90].

However, as most of the actions in the EU Biodiversity Action Plan are addressed at both EC and Member States levels, the objectives and targets cannot be effectively delivered without Community and national level co-operation and commitment. In this regard the second 'mid-term' report, covering the period up the end of 2008, aims to evaluate progress at both Community and Member State level. Also, it represents the last real stock-taking opportunity before 2010 and should provide a platform to revisit the issue of biodiversity protection at the highest political level by 2010.

The report is factual, highlighting any significant gaps in delivery. It may also identify any essential adjustments to actions to meet the 2010 target. It is supported by more detailed evaluations of progress at EC and Member State levels as well as an indicator based assessment of progress by the EEA.

B. Progress assessment

Target 1.4 Action Plan adjusted as necessary in 2010, [new plan adopted in 2013]

This report is a response of the commitment of the European Commission to provide annual assessment to 2010 on progress in delivery of the EU Biodiversity Action Plan. It covers the period from adoption of the Biodiversity Communication up to end of 2008 and focuses on Community level and Member States action.

Preparation of the report has involved consultations within the European Commission in the framework of the Interdepartmental Biodiversity Co-ordination Group for the necessary updated assessment of Community level action for each of the actions of the Biodiversity Action Plan.

There have also been discussions with Member States both within the framework of meetings of the Nature Directors and of the Coordination Group for Biodiversity and Nature. At the Lisbon Nature Directors meeting in November 2007 a mechanism for Member State information inputs to the preparation of the mid-term report was agreed, aimed at reducing the reporting burden to a minimum by making use of all relevant available information sources. Consistent with this agreement the Commission prepared a questionnaire for each Member State to complete for the limited number of key issues which would otherwise not be covered

89 COM (2006) 216 Final.

90 http://ec.europa.eu/environment/nature/knowledge/rep_biodiv_ap/index_en.htm.

by the report. This was sent to Member States in January 2008. Together with existing information and databases the responses were to be used to prepare country summary profiles, to be sent to Member States for validation.

There have been significant delays in responses to the Questionnaire and 6 Member States did not provided any responses[91]. Based on available information the Commission has compiled country profiles for all Member States, with the assistance of a consultancy contract. The detailed information that underpins these country summaries is available on the CIRCA web site, to which Member States have access. The country profiles have been sent to the Member States for verification. These profiles represent an important first assessment of national action to address the concerns of the Biodiversity Action Plan.

The State of the Environment perspective is supported by the 26 SEBI 2010 biodiversity indicator fact sheets provided by the EEA.

The mid-term Report from the Commission to the Council and European Parliament, comprises the Communication, which is summary text of progress at EC and Member States levels in relation to objectives and targets; an updated assessment at Community level for each action of the BAP; a summary Country Profiles for each Member State; an indicator fact sheets from the European Environment Agency led project on Streamlining of European Biodiversity Indicators (SEBI); a synthesis consolidated report, combining for different objectives and targets the summaries for Community and Member State level assessments, the relevant indicators and any key messages in support of the Communication.

On the basis of the combined country and Community assessments the Commission will also identify key comparative information for the production of a SCOREBOARD to communicate progress in relation to key elements of the Biodiversity Action Plan.

The fourth annual report (to end 2010) will evaluate the extent to which the EU has met its 2010 commitments. This will involve qualitative assessment of the extent to which Action Plan actions have been implemented and targets achieved, including consideration of underlying assumptions and possible missing actions. The evaluation will also be informed by quantitative data relating to a set of headline biodiversity indicators.

The seventh annual report (to end 2013) will provide a similar evaluation, addressing also all post–2010 targets in the Action Plan.

These evaluations also drawn on the ongoing study on the economics of ecosystems and biodiversity (TEEB) and the Millennium Ecosystem Assessment will inform final evaluation of the 6th EAP, review of sectoral policies and budgets during the 2007–2013 period, and policies and budgets for the post–2013 period.

[91] Greece, Italy, Luxembourg, Malta, Portugal, Slovakia.