

Pan-European Biological and Landscape Diversity Strategy

**Text drawn up in collaboration with the
European Centre for Nature Conservation
Tilburg, The Netherlands**

**submitted by the Council of Europe
at the Ministerial Conference "Environment for Europe"
(Sofia, Bulgaria, 23-25 October 1995)**

and

**approved by the Ministers of the Environment
of the 55 states present at the Conference**

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**Extract of the Declaration adopted by the Ministers of the Environment
in Sofia on 25 October 1995**

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26. Recognising the uniqueness of landscapes, ecosystems and species, which include, inter alia, economic, cultural and inherent values, we call for a Pan-European approach to the conservation and sustainable use of shared natural resources. We endorse the Pan-European Biological and Landscape Diversity Strategy, as transmitted by the Committee of Ministers of the Council of Europe for adoption at this Conference, as a framework for the conservation of biological and landscape diversity. We welcome the readiness of the Council of Europe and UNEP, in cooperation with OECD and IUCN, to establish a Task Force or other appropriate mechanism in order to guide and coordinate the implementation and the further development of the Strategy. In this respect we request the widest possible consultation and collaboration in order to achieve its objectives with a view to reporting on progress at the next Conference.

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Executive summary

The Pan-European Biological and Landscape Diversity Strategy presents an innovative and proactive approach to stop and reverse the degradation of biological and landscape diversity values in Europe. Innovative, because it addresses all biological and landscape initiatives under one European approach. Pro-active, because it promotes the integration of biological and landscape diversity considerations into social and economic sectors. The Strategy reinforces the implementation of existing measures and identifies additional actions that need to be taken over the next two decades. The Strategy also provides a framework to promote a consistent approach and common objectives for national and regional action to implement the Convention on Biological Diversity.

Why the Strategy?

Europe has a shared responsibility towards conserving its natural heritage and passing it on to future generations. Recent political and social developments in Europe offer a number of unique opportunities to act in favour of the conservation of biological and landscape diversity. Throughout the continent, agricultural practice is changing, former military, industrial and agricultural land is becoming available and has a potential for nature development, international cooperation is increasing in all areas and there is growing public awareness and concern for biological and landscape diversity issues. These considerations have led the Council of Europe in cooperation with other national and international organizations, both governmental and non-governmental, to take the initiative to develop united European action.

Many initiatives have been and are being undertaken to address the continuing deterioration of the natural environment. Their capacity would be enhanced and their effectiveness increased when:

- initiatives cover the whole of Europe;
- biological and landscape diversity is integrated adequately into all social and economic sectors;
- conservation of landscapes is adequately incorporated in the major initiatives dealing with biodiversity;
- subsidiarity, partnership and involvement are incorporated;
- initiatives make use of all mechanisms available, in order to change how society thinks and works in relation to biological and landscape diversity, including: international and national markets and trade policy, multilateral or bilateral funds, fiscal and financial policy, initiatives and programmes, public awareness and participation;
- all the main actors in the economic sectors, the land users, the authorities and the general public are involved;
- the same Strategic principles to achieve goals are implemented, thereby achieving possible synergy.

Strategic framework

The Pan-European Biological and Landscape Diversity Strategy is a European response to support implementation of the Convention on Biological Diversity. The Strategy was proposed in the Maastricht declaration *Conserving Europe's Natural Heritage* (1993), and builds on the Bern Convention, the European Conservation Strategy (1990), the Dobriř and Lucerne Ministerial Conferences (1991, 1993), UNCED (1992), and other existing initiatives and programmes.

The Strategy introduces a coordinating and unifying framework for strengthening and building on existing initiatives. It does not aim to introduce new legislation, but to fill gaps where these initiatives are not implemented to their full potential or fail to achieve desired objectives. Further, the Strategy seeks to more effectively integrate ecological considerations into all relevant socio-economic sectors, and increases public participation in, and awareness and acceptance of, conservation interests. Based on the findings of the European Environment Agency report *Europe's Environment: The Dobriř Assessment*, the Strategy addresses the strengths and weaknesses of existing initiatives, and promotes practical action where there is a lack of suitable instruments, or where existing mechanisms are not implemented to their full potential.

Strategic principles

The Strategy requires the application of 10 principles through all sectors using natural resources, to achieve wise management of biological and landscape diversity. These are the principles of: careful decision making, avoidance, precaution, translocation, ecological compensation, ecological integrity, restoration and (re)creation, best available technology and best environmental practice, polluter pays, public participation/public access to information.

Strategy aims and objectives:

Aims

1. Threats to Europe's biological and landscape diversity are reduced substantially.
2. Resilience of Europe's biological and landscape diversity is increased.
3. Ecological coherence of Europe as a whole is strengthened.
4. Full public involvement in conservation of biological and landscape diversity is assured.

Objectives

1. Conservation, enhancement and restoration of key ecosystems, habitats, species and features of the landscape through the creation and effective management of the Pan-European Ecological Network.
2. Sustainable management and use of the positive potential of Europe's biological and landscape diversity through making optimum use of the social and economic opportunities on a national and regional level.
3. Integration of biological and landscape diversity conservation and sustainable use objectives into all sectors managing or affecting such diversity.
4. Improved information on and awareness of biological and landscape diversity issues, and increased public participation in actions to conserve and enhance such diversity.
5. Improved understanding of the state of Europe's biological and landscape diversity and the processes that render them sustainable.
6. Assurance of adequate financial means to implement the Strategy.

Operational framework

The legal basis for implementing action under the Strategy is found in existing and widely accepted international agreements and treaties such as the Convention on Biological Diversity, Bern Convention (which in the Monaco Declaration was indicated as the main instrument for implementing the Convention on Biological Diversity in Europe), the Bonn and Ramsar Conventions, and the Habitats and Birds Directives of the European Union.

Priorities for action

In the next 20 years, the Strategy seeks to introduce biological and landscape diversity considerations into all social and economic sectors by striving to integrate them into agriculture, forestry, hunting, fisheries, water management, energy and industry, transportation, tourism and recreation, defence, structural and regional policies and urban and rural planning.

Actors to be mobilized

Main actors that would be involved in the implementation of the Strategy would include national authorities, bilateral donors, international organizations and financial institutions, organizations and associations active in the economic sector, private enterprises, the research community, information dissemination organizations, private and public landowners, non-governmental organizations, the public (grassroot and citizen groups), indigenous and local peoples of the regions of Europe.

Structure for Action Plans

Actions are to be implemented by dividing the Strategy into five year Action Plans providing a framework which contributes to a common European response to the Convention on Biological Diversity and in particular the National Biodiversity Strategies. The Action Plans identify the fundamental actions towards the realization of each set of five year goals. By linking into existing initiatives and work programmes, a coherent spectrum of projects is executed, fitting within the framework of the Strategy.

Action Plan on Biological and Landscape Diversity 1996-2000

Introduction

The first five year Action Plan specifically sets out to remedy the deterioration in the state of the key biological and landscape systems, and to strengthen their coherence. Particular focus for this period would be on supporting the integration of Pan-European priorities into national policy and initiatives based on the National Biodiversity Strategies, Programmes and Plans which each government will set up to implement the Convention on Biological Diversity.

The Action Plan should stimulate the development of national ecological networks and the realization of the Pan-European Ecological Network. In addition, focus would be on promoting sustainable use of the natural environment's economic resources in all regions of Europe. Maximum use is made of unique opportunities being offered by current social, political and economic developments in Europe on the national and international level. In the Action Plan 1996-2000 the Council of Europe should establish a Pan-European Task Force to set up and steer the Strategy process. The Action Plan will consist of 11 other action themes: 4 addressing issues of Pan-European importance, 6 addressing priority landscapes and ecosystems, and 1 introducing action for threatened species. The prioritization of the issues concerning landscapes, ecosystems and species for the 1996-2000 period is based on an analysis of the reports *Europe's Environment: The Dobriř Assessment*' and IUCN *Parks for Life: Action for Protected Areas in Europe*.

Action Themes

0. Pan-European action to set up the Strategy process.
1. Establishing the Pan-European Ecological Network.
2. Integration of biological and landscape diversity considerations into sectors.
3. Raising awareness and support with policy makers and the public.
4. Conservation of landscapes.
5. Coastal and marine ecosystems.
6. River ecosystems and related wetlands.
7. Inland wetland ecosystems.
8. Grassland ecosystems.
9. Forest ecosystems.
10. Mountain ecosystems.
11. Action for threatened species.

Action Plan focus on sectors

The actions should specifically address the integration of biological and landscape diversity into the key sectors impacting on the natural environment, and in particular focus on agriculture and rural economy, as throughout Europe it is the rural sector that has the most direct interaction with biological and landscape diversity. Furthermore, agricultural policy and practice is currently undergoing change which offers the greatest opportunity for action towards achieving the overall aims of the Strategy.

Actions and projects

Based on the Strategy objectives, a series of actions have been identified in the Action Plan 1996-2000. They may

fall within National Biodiversity Action Plans or the existing work programmes of international organizations, government authorities, economic sectors or non-governmental organizations and therefore could be elaborated into projects, and be undertaken by these organizations as separate, individual or standalone activities, while still contributing towards the realization of the Action Plan 1996-2000. Prioritization in the Action Plan has been based, among other sources, on the responses and policy options indicated in *The Dobriš Assessment* and IUCN *Parks for Life*.

Review and assessment of the Strategy

The review procedure is divided into four parts. It would be coordinated by a Pan-European Task Force on Biological and Landscape Diversity to be established in 1996 under the auspices of the Council of Europe which would report progress to the *Environment for Europe* Ministerial Conferences. The Task Force would seek representation from countries party to the Council of Europe, other European countries, international organizations including the European Union, United Nations bodies such as UNDP, UNECE, UNEP, UNESCO and FAO, the World Bank, donors and international non-governmental organizations. Through the Task Force, the parties and actors should be responsible for ensuring proper communication and consultation within their respective areas of responsibility for particular actions engaged in under the Strategy. The review process would be institutionally localized in the Council of Europe with regular assemblies of the governmental parties adhering to the Strategy, and at which venue other actors could also participate.

STRATEGIC ACTION PLAN 1996-2000

Action Themes

- 0 Pan-European action to set up the Strategy process**
- 0.1 Develop a Pan-European Task Force for coordinating action under the Strategy.
- 0.2 Assist introduction of National Biodiversity Strategies in all countries of Europe by the year 2000.
- 0.3 Applying the lessons of the EU Habitats Directive and the Bern Convention.
- 1 Establishing the Pan-European Ecological Network**
- 1.1 Establish a development programme for the Pan-European Ecological Network.
- 1.2 Develop the first phase of an implementation programme.
- 1.3 Stimulate the development of national ecological networks.
- 1.4 Promote awareness of the Pan-European Ecological Network.
- 2 Integration of biological and landscape diversity considerations into sectors**
- 2.1 Invite each sector to present its own biodiversity plan within the agreed time frame.
- 2.2 Promote management of ecological refugia in agricultural environments.
- 2.3 Influence appropriate use of funding mechanisms.
- 2.4 Ensure that privatization processes incorporate adequate conservation safeguards.
- 3 Raising awareness and support with policy makers and the public**
- 3.1 Develop a European-wide awareness and support campaign.
- 3.2 Secure improved opportunities for public awareness.
- 3.3 Establish capacity building services.
- 4 Conservation of landscapes**
- 4.1 Compile a comprehensive reference guide on European biological and landscape diversity.
- 4.2 Establish guidelines to address policies, programmes and legislation for mutually supportive protection of biodiversity, cultural and geological heritage.
- 4.3 Set up a Code of Practice to involve landowners to promote awareness of biodiversity of landscapes traditionally valued/managed for their historical and cultural importance.
- 4.4 Establish an action plan using awareness techniques, guidelines and demonstrations to safeguard geological features in the landscape, actively involve and consult landowners and the energy, industry and water management sectors in their conservation.
- 4.5 Investigate the relationship between traditional landscape and regional economy.
- 5 Coastal and marine ecosystems**
- 5.1 Develop and implement a European coastal and marine ecological network.
- 5.2 Develop an integrated coastal zone management approach to land and sea utilization, management and planning as one system, based on conservation considerations.
- 5.3 Develop a special Coastal Code of Conduct, which provides clear recommendations and good practice to coastal authorities, project developers, coastal engineers and others.
- 5.4 Initiate priority conservation action for coastal/marine systems important in maintaining biodiversity in northern Europe, Atlantic, Boreal, Baltic and Mediterranean regions.

- 5.5 Strengthen, establish and maintain priority conservation areas as key reproductive habitats for monk seals and marine turtles in the eastern Mediterranean.
- 5.6 Establish action plan for the conservation of Mediterranean seagrass prairies.
- 5.7 Assist in promoting coastal tourism policies that concentrate on quality improvement in existing resorts rather than new development in the Mediterranean and Black Sea areas.
- 5.8 Assess methods to strengthen biodiversity and landscape values in integrated models, focusing on ensuring concentrated and compact rather than linear seafront development in the Mediterranean, Black and Baltic Seas.
- 5.9 Establish action towards control and elimination of harmful exotic species in the Mediterranean and Black Sea.
- 5.10 Assist in joint conservation action for the Caspian Sea.

6 River ecosystems and related wetlands

- 6.1 Develop an international programme of establishing and managing conservation areas and integrated management plans for rivers and their flood plains to enhance buffering riparian vegetation and their ecological corridor function.
- 6.2 Increase awareness and conservation of traditionally managed riverine landscapes and support tourism and regional economy.
- 6.3 Set up conservation programmes to conserve major semi-natural rivers with well developed natural elements still existing in Europe.
- 6.4 Set up and promote species reintroduction and habitat restoration projects in Atlantic and Baltic regions.

- 6.5 Identify and protect all riverine forests and other habitats under threat in the Atlantic region and promote adequate protection mechanisms.
- 6.6 Develop action plan to promote non-damaging alternatives to landscape and ecosystem loss from large water storing reservoirs and river diverting dams in the Mediterranean.
- 6.7 Initiate awareness campaigns of the least damaged Scandinavian and CEE rivers.

7 Inland wetland ecosystems

- 7.1 Prepare guidelines to support policies for the restoration and rehabilitation of wetland systems damaged by previous development so as to contribute and support ecological networks.
- 7.2 Establish Code of Conduct to ensure that conservation objectives are incorporated into policies affecting wetlands through the concept of wise use (Ramsar Convention).
- 7.3 Establish a programme on the integration of wetland wise use into European and national policies.
- 7.4 Undertake action to promote national and regional planning on hydrological management of catchments.
- 7.5 Establish conservation action plans for threatened wetlands that play an important role in maintaining the biological and landscape diversity of the biogeographical regions, focusing primarily on Atlantic, Baltic and Mediterranean regions and northern and eastern Europe.
- 7.6 Assess the conservation importance of peat bogs, especially in relation to peat extraction and trade.

8 Grassland ecosystems

- 8.1 Encourage natural and semi-natural grassland action plans at a Pan-European level.
- 8.2 Develop grassland agricultural management schemes supported by concrete measures at the local, national and international level.

8.3 Give special attention to monitoring data gathering policy requirements of grassland and agricultural zones.

8.4 Prioritize conservation of grasslands of high biological and landscape diversity in different types of grassland habitats, focusing on Alpine, Atlantic, Baltic, Iberian and eastern Mediterranean regions, and central and eastern Europe.

8.5 Request the development of an outline EU-vision and action plan for semi-natural grasslands, integrating regional development, agriculture, environmental and social policies.

8.6 Develop concrete action to apply successful mechanisms for maintaining extensively managed grasslands, using ESA-type tax incentives and land stewardship in the wider landscape.

8.7 Consider methodologies for the application of cross-compliance in the framework of the CAP reform to support biological and landscape diversity values.

8.8 Develop public and private participation schemes in CEE privatization programmes of agricultural areas.

9 Forest ecosystems

9.1 Conserve adequate areas to secure all types of forests in Europe, and specifically prioritize efforts towards alluvial and virgin forests, ancient secondary woodland, and riparian forest corridors, taking into account needs of indigenous and local peoples.

9.2 Conserve forest habitats of species requiring large undisturbed forest ecosystems, including Bern Convention, Habitats Directive and UNECE threatened species.

9.3 Devise and promote an action plan for biodiversity, landscape and ecological networking considerations to forest management and in the use of renewable forest products.

9.4 Initiate studies on the adjustment of European forests management systems in order to

optimize adaptation to climate change, to ensure the health and multiple functions of existing forests, and to optimize the sequestration and storage of carbon.

9.5 Initiate studies on the adjustment of European forest management systems.

9.6 Secure an effective network of protected areas to maintain the northern boreal forests.

9.7 Strengthen sustainable management and protection of viable old growth forests in Mediterranean regions.

9.8 Identify and initiate restoration and regeneration plans of the most important fragmented forests of intrinsic value in CEE and Atlantic regions.

9.9 Establish a conservation assessment and programme as a consequence of privatization and/or market conditions impacting on sustainable forest management in the CEE.

9.10 Establish procedures to ensure greater collaboration with indigenous and local peoples for effective sustainable management of forests for economic and cultural/biological diversity use in the Arctic, Boreal and CEE regions.

10 Mountain ecosystems

10.1 Develop a Code of Conduct to conserve mountain biological and landscape diversity prioritizing transfrontier Pan-European ecological network actions.

10.2 Establish demonstration afforestation schemes that are based on sustainable environmental objectives and schemes.

10.3 Undertake action to assess and review the option to restructure mountain farming subsidies to support rural development rather than supporting higher productivity rates.

10.4 Set up information campaign aimed at politicians and planning authorities to inform them of the issues relating to settlements in mountain regions.

10.5 Promote schemes for "no climbing, gliding, off-road or skiing

areas/seasons" and legally enforce climbing bans on cliffs important for biological and landscape diversity.

- 10.6 Undertake a review on the potential application of mechanisms for Arctic-Alpine, Balkan and Caucasus regional protection, using the experience of the Alpine Convention.
- 10.7 Undertake initiatives to establish new transfrontier protected areas, and to strengthen management of existing mountain protected areas especially in CEE.
- 10.8 Establish guideline on how to promote low-intensity farming through management agreements under the EU Agri-Environment Regulation.
- 10.9 Undertake studies to assess and review options of the applicability of establishing ESA-type management agreements in CEE through GEF support schemes.
- 10.10 Establish guidelines for the conservation of the mountain ecosystem in the Tian Sian region.

11 Action for threatened species

- 11.1 Develop species action plans for all species and their genetic diversity being threatened at the Pan-European level, targeting threatened species with popular appeal, negative appeal, cultural relevance and economic relevance.
- 11.2 Mobilize joint efforts, including zoological and botanic gardens expertise throughout Europe for *in situ* and *ex situ* conservation and reintroduction/restoration programmes wherever such actions are integrated into species action plans.
- 11.3 Establish a Pan-European list of threatened and protected species by reviewing and assessing lists in existing treaties, conventions and programmes.
- 11.4 Promote public awareness campaigns based on flagship species which highlight the issues involved in the protection of

threatened species.

- 11.5 Encourage countries to develop and implement regional lists and action plans for threatened species.

PAN-EUROPEAN BIOLOGICAL AND LANDSCAPE DIVERSITY STRATEGY

This Strategy presents an innovative and proactive approach to stop and reverse the degradation of biological and landscape diversity values in Europe. Innovative, because it addresses all biological and landscape initiatives under one European approach. Proactive, because it promotes the integration of biological and landscape diversity considerations into social and economic sectors.

The Strategy reinforces the implementation of existing measures and identifies additional actions that need to be taken over the next two decades. The Strategy also provides a framework to promote a consistent approach and common objectives for national and regional action to implement the Convention on Biological Diversity.

The Pan-European Biological and Landscape Diversity Strategy is based on the following terms:

Biological Diversity: the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (Article 2 of the Convention on Biological Diversity).

Landscape Diversity: the formal expression of the numerous relations existing in a given period between the individual or a society and a topographically defined territory, the appearance of which is the result of the action, over time, of natural and human factors and a combination of both (Council of Europe Draft Recommendation on the Integrated Conservation of Cultural Landscape Areas as part of Landscape Policies).

CHAPTER 1 OVERVIEW

1.1 Introduction

Europe's biological and landscape diversity is one of our greatest riches. It is a heritage passed down to us over thousands of years and linked to other natural systems worldwide. We have a shared responsibility to pass this heritage on to future generations as a diverse and sustainable system. Europe's natural diversity is in decline, however, the decline is rapid and continuing. Across the continent, valuable and characteristic habitats are suffering serious damage; this has led to decline in the diversity, number and range of a wide variety of species, habitats and landscapes.

Traditional man-made landscapes, as well as natural and semi-natural habitats of European importance such as coastal zones, marine areas, wetlands, forests, mountain areas and grasslands, are under threat; so are many wild plant and animal species. The most obvious issues are changes in land use, and reduction in area of natural and semi-natural habitats, with their resulting fragmentation.

1.2 Justification

Many important initiatives have already been taken to conserve Europe's natural heritage, but - in spite of efforts by government bodies, non-governmental organizations and individuals - the biological and landscape diversity of Europe continues to decline at a rapid rate. An analysis of gaps in existing nature conservation initiatives and mechanisms indicates that they will be better used when:

- a coherent framework is set up to mobilize all existing initiatives towards the one goal of conserving biological and landscape diversity throughout Europe;
- key factors contributing to the deterioration of biological diversity and landscape diversity are recognized, addressed or influenced.

Full analyses of existing mechanisms are listed in Annexes 1a-1c.

Recent political and social developments in Europe offer a number of unique opportunities to act in favour of the conservation of biological and landscape diversity. Throughout the continent agricultural practice is changing; former military, industrial and agricultural land is becoming available and has a potential for nature conservation; international cooperation is increasing in all areas, and there is growing public awareness and concern for biological and landscape diversity issues.

To conclude, it is recognized in the European context that:

- conserving Europe's natural heritage is a basic necessity for securing sustainable development in Europe;
- conserving Europe's natural heritage is a shared responsibility of all European countries and regions and a task which can only be successfully undertaken in a Pan-European context;
- Pan-European cooperation would strengthen the effectiveness of national action under the Convention on Biological Diversity;
- the issue of landscape diversity is as yet not adequately integrated into mechanisms aimed at protecting and enhancing the natural environment;
- public attitude, awareness and understanding of conservation issues is a very effective safeguard for maintaining biological and landscape diversity;
- far-reaching political and economic changes over the past decade require new answers to new challenges in land use and use of natural resources;
- sustainable management of the natural environment as an economic resource is a prerequisite for continued economic and social development and prosperity in Europe;
- the threats to biological and landscape diversity require urgent action that both integrates and builds on existing national and international activity;
- the decline in Europe's natural environment has been caused by economic and social action, and thus the integration of conservation considerations into socio-economic policy is a prerequisite for restoring and maintaining biological and landscape diversity;
- by facilitating local initiatives towards sustainable development, involving all land users, a new balance may be achieved in rural areas between social and economic dynamics and ecological stability.

These considerations have led the Council of Europe, in cooperation with other national and international organizations, both governmental and non-governmental, to take the initiative to develop the Pan-European Biological and Landscape Diversity Strategy.

1.3 The Strategy

The Pan-European Biological and Landscape Diversity Strategy is a European response to support implementation of the Convention on Biological Diversity. The Strategy was proposed in the Maastricht Declaration *Conserving Europe's Natural Heritage* (1993), and builds on the Bern Convention, the European Conservation Strategy (1990), the Dobriř and Lucerne Ministerial Conferences (1991, 1993), UNCED (1992), and other existing initiatives and programmes. The Strategy aims to strengthen the application of the Bern Convention in relation to the Convention on Biological Diversity, following the Monaco Declaration.

The Strategy introduces a coordinating and unifying framework for strengthening and building on existing initiatives. It does not aim to introduce new legislation or programmes, but to fill gaps where initiatives are not implemented to their full potential or fail to achieve desired objectives. Furthermore, the Strategy seeks to more effectively integrate ecological considerations into all relevant socio-economic sectors, and will increase public participation in, and awareness and acceptance of, conservation interests.

1.4 Vision for the future of Pan-European biological and landscape diversity

The Strategy's vision for the future is to achieve conservation and sustainable use of biological and landscape diversity for the whole continent of Europe and all its regions within 20 years, and will seek to ensure that:

- the threats to Europe's biological and landscape diversity are reduced substantially;
- the resilience of European biological and landscape diversity is increased;
- the ecological coherence of Europe as a whole is strengthened;
- full public involvement in conservation of biological and landscape diversity is assured.

These aims should be achieved within 20 years. To achieve them, the Strategy seeks to ensure that:

- full use is made of existing legal, administrative and socio-economical mechanisms at the international, national, regional and local level;
- action is taken at the appropriate level, whether Pan-European, regional, national or local;
- management practices enhance and strengthen the resilience of biological and landscape diversity;
- adequate scientific, technical and financial resources are made available;
- appropriate arrangements are made for monitoring the implementation of the Strategy;
- the emphasis is on measures and activities with broad applications or results.

Because of the urgent need to deal with certain pressing problems, the Strategy should be implemented through a series of five year Action Plans. The Action Plans address the issues that are considered most pressing and important. They make optimal use of opportunities as they occur over the next 20 years by prioritising the themes that need to be addressed at the European level and the ecosystems, landscapes, species and regions that require priority attention.

Europe's Environment: The Dobříš Assessment

The Pan-European ministerial conference in Dobříš Castle (former Czechoslovakia, June 1991) called for a report on the state of the European environment. The report, prepared by the European Environment Agency, is the basic input for an Environmental Programme for Europe (EPE). Part I of *Europe's Environment: The Dobříš Assessment* introduces the context and reporting techniques used. Part II assesses the state of the environment in eight different fields. Part III examines the pressures which impact the environment and Part IV describes the sources of these pressures according to eight different economic sectors. Part V summarizes 12 major environmental problems in Europe.

State of Europe's biological and landscape diversity

Europe's landscapes are diverse and rich in natural and cultural dimensions, and its ecosystems comprise a large diversity of habitats and a rich flora and fauna. Over the past decades, there has been a rapid decline in biological and landscape diversity.

Six per cent of Europe's land area is under landscape protection, but generally with a weak legal status. Geological landscapes and sites of Europe, such as dune systems, creek systems, eskers, drumlins and bogs, are disappearing forever.

Forests once covered 80 to 90% of the territory, but are now reduced to 33%. Natural river sites are small and threatened. Protection is insufficient. Grasslands are concentrated in south-eastern Europe, the Mediterranean and the Central European Plain, and fragmentation and small size characterizes many central and western European sites. Inland wetlands like bogs, fens and marshes have disappeared in large numbers. Iberia lost over 60% of such habitats. Protection of raised bogs averages only 3% in 18 European countries. Coastal and marine ecosystems too are adversely affected: 70% of the representative sites of the Mediterranean are facing stresses and external threats; Western Mediterranean has lost more than 75% of coastal dunes since 1900; more than 33% of the Wadden Sea salt-marshes have been lost during the last 50 years.

Many plant and animal species, and their genetic diversity, are currently declining or threatened with extinction: fish with 53% under threat, reptiles 45%, mammals 40%, birds 40% and 21% of Europe's 12,500 higher plant species are threatened.

Europe's Environment: The Dobříš Assessment indicates several causes for the deterioration of landscapes and the natural environment on the Pan-European level. Traditional farming has given way to intensive agriculture, a process accelerated by subsidies, with enormous effects on the rural landscape. The strong focus of forestry management on short term economic targets has caused the decline in forest biodiversity. The policies pursued in industry, transport and energy production are having a direct and damaging impact on the coasts, major rivers (dam construction and associated canal building) and mountain landscapes (main road networks). Mass tourism affects mountains and coasts. Public and political knowledge and concern about the natural environment remains generally insufficient.

CHAPTER 2 STRATEGY 1996-2016

2.1 Purpose of the Strategy

The Strategy encourages a more concerted and therefore more efficient use of existing policy, initiatives, mechanisms, funds, scientific research and information to maintain and enhance European biological and landscape diversity.

The main challenge to be addressed by the Pan-European Biological and Landscape Diversity Strategy is to encourage conservation and sustainable use of the natural environment.

Exploitation of the natural environment is the major cause of deterioration of biological and landscape diversity. The economic potential of the environment will continue to be used in the future and conservation efforts will only be successful if socio-economic factors are taken into account.

Based on the findings of *Europe's Environment: The Dobriř Assessment*, the Strategy addresses the strengths and weaknesses of existing initiatives, and promotes practical action where there is a lack of suitable instruments, or where existing mechanisms are not implemented to their maximum potential.

2.2 Pan-European aims and objectives

The Strategy's vision for the future is to achieve conservation and sustainable use of biological and landscape diversity for the whole continent of Europe and its territories within 20 years, and specifically to seek to ensure the following aims:

1. Threats to Europe's biological and landscape diversity are reduced substantially.
2. Resilience of European biological and landscape diversity is increased.
3. Ecological coherence of Europe as a whole is strengthened.
4. Full public involvement in conservation of biological and landscape diversity is assured.

The Strategy sets out to achieve the following objectives over this period:

1. Conservation, enhancement and restoration of key ecosystems, habitats, species and features of the landscape through the creation and effective management of the Pan-European Ecological Network.
2. Sustainable management and use of the positive potential of Europe's biological and landscape diversity through making optimum use of the social and economic opportunities on a local, national and regional level.
3. Integration of biological and landscape diversity conservation and sustainable use objectives into all sectors managing or affecting such diversity.
4. Improved information on, and awareness of, biological and landscape diversity issues, and increased public participation in actions to conserve and enhance such diversity.
5. Improved understanding of the state of Europe's biological and landscape diversity and the processes that render them sustainable.
6. Assurance of adequate financial means to implement the Strategy.

A Common Vision for Europe

After the first five years of the Strategy, there should be national biodiversity strategies and action plans for all countries of Europe to implement the Convention on Biological Diversity. In the years to follow, national ecological network action plans and networks should have been established, and by 2005 a Pan-European Ecological Network should be realized, along which animal and plant species would be able to migrate freely.

In 20 years the Strategy aims to realize full biological and landscape diversity conservation, including *inter alia* the safeguarding of the last wild rivers, wetlands and coasts, and the last remaining virgin forests of Europe. There would be public and civic understanding and commitment to preserving Europe's natural heritage. Geological and cultural features determining landscape identity would be adequately protected.

In addition, biological and landscape diversity considerations would be integrated into relevant economic and social sectors as far as practicable. In particular, it is anticipated that agriculture, marine fisheries, forestry, and tourism sectors would recognize biological and landscape diversity as the heart of their industry, and actively strive to maintain and enhance nature and landscapes.

2.3 Priorities for action

Actions to implement the Strategy could take place throughout all nations of Europe, with Pan-European action aiming to cover as many of the cultural and political regions as possible. It is anticipated that full account will be taken of cultural diversity, regional identity and regional economy in implementing the Strategy, and that optimal use will be made of opportunities offered by regional and cultural variation to maintain and enhance biological and landscape diversity.

The *Europe's Environment: The Dobriš Assessment* report identifies seven geographical regions in Europe: Boreal, Baltic, Central, Atlantic, East, Alpine and Mediterranean, these are mainly based on biogeographic factors such as climate, soil and vegetation. In implementation of the Strategy, action could take place throughout all these regions, but particular attention will be paid to ecosystems, land/seascapes and species that are of Pan-European importance. These are identified as:

- **ecosystems:** coastal and marine ecosystems, rivers, inland wetlands, grasslands, forests, and mountains.
- **land/seascapes:** tundra, taiga, uplands, bocages, open fields, steppe and arid landscapes, and cultural heritage landscapes.
- **species:** flagship species, and species and populations threatened and at risk of extinction throughout Europe or its regions.

Within the consecutive five year Action Plans, specific ecosystems, landscapes and species will be prioritized, to address urgent threats, or to make full use of opportunities that occur.

The Convention on Biological Diversity (Articles 6b, 7c, 10a 10b, and 14) and the European Union's Fifth Environment Action Programme identify the key sectors impacting on the natural environment as being agriculture, forestry, fisheries, energy, industry, transport and tourism. Action to implement the Strategy should focus on these sectors, and in addition also on structural and regional policy, water management and rural and urban planning.

In the next 20 years, the Strategy seeks to strengthen biological and landscape diversity considerations in all social and economic sectors by striving to:

Agriculture: Recognize the vital role of agriculture for the management of landscapes and semi-natural habitats as well as for maintenance of biological diversity and support this role in decision-making processes; stimulate wise management of agricultural land, including organic farming methods; reduce the use of fertilizers and pesticides as much as possible.

Energy and Industry: Integrate ecological considerations into general policies in this field and into the choice of localities for industrial activities, to make industrial and energy policies, including the abatement of emissions of hazardous substances, where possible, supportive of biological and landscape diversity policy.

Forestry: Better integrate the strategic principles into forest management, and thus further enhance indigenous tree species, set aside forest areas to develop naturally, harmonize afforestation policies with nature conservation and landscape policies, and allow the wise use of fertilizers and pesticides where appropriate.

Hunting and Fisheries: Integrate biological and land/seascape diversity objectives into hunting and fishery policies in such a way that these activities and nature conservation can coexist, taking into account the sustainability of the resources, the minimization of by-catches as regards fisheries and the adverse impacts of fisheries and hunting on benthic, pelagic and other wildlife communities.

Structural and Regional Policies: Make policies for the conservation of biological and landscape diversity mutually supportive with structural and regional policies, especially in the field of rural economy and extensive agriculture, thus changing the mainstream of fund-assisted development to sustainable development.

Tourism and Recreation: Integrate nature and landscape conservation objectives into tourism and recreation policies and stimulate their ecological sustainability, in order to improve the economic basis of ecologically sound forms of land use and prevent significant damage to biological and landscape diversity.

Transportation: Integrate biological and landscape diversity considerations into transport policies and infrastructure development, avoiding areas of high value as much as possible; prevent or mitigate the negative impacts of infrastructure works and transportation activities on landscapes and ecosystems.

Urban and Rural Planning: Integrate different interests bearing on the planning of rural areas and urban planning in such a way that natural and landscape values are safeguarded, especially in areas with high biological and landscape diversity value and in the wider countryside.

Water Management: Integrate objectives for conservation of biological and landscape diversity objectives into all aspects of water management, including reducing discharges and run-off of polluting substances.

Defence: Integrate biological and landscape diversity objectives into defence policy, to avoid areas of high natural value as much as possible and prevent or mitigate negative impacts of military activities on landscapes, in order to promote sound forms of land use.

2.4 Strategic principles

The Strategy is based on the application of the following principles through all sectors using or having an influence on natural resources, to achieve the conservation and sustainable use of biological and landscape diversity:

1. The Principle of *Careful Decision Making*: decisions relating to the Strategy are made on the basis of the best available information, and as far as possible and appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of biological and landscape diversity.

2. The Principle of *Avoidance*: introduction of appropriate procedures requiring environmental impact assessment of projects that are likely to have significant adverse effects on biological and landscape diversity, with a view to avoiding such effects and, where appropriate, allow for public participation in such procedures. This would include projects concerning introduction into the natural environment of exotic species, or of the release of genetically modified organisms.
3. The *Precautionary Principle*: action to introduce appropriate procedures to avoid or minimize potentially adverse impact of activities on biological and landscape diversity, ought not be postponed if the causal link between those activities and the impact has not yet been fully confirmed.
4. The Principle of *Translocation*: those activities that are exceptionally harmful to biological and landscape diversity, and cannot be avoided, will, where possible or practicable, be relocated to areas where they will cause less impact.
5. The Principle of *Ecological Compensation*: the harmful effects of physical changes in areas with high biological and landscape diversity value which cannot be avoided, must be balanced by compensatory conservation measures by the user.
6. The Principle of *Ecological Integrity*: the ecological processes responsible for the survival of species should be protected and the habitats on which their survival depends maintained.
7. The Principle of *Restoration and (Re)Creation*: where possible biological and landscape diversity should be restored and/or (re)created if it can be demonstrated by reference studies that the original state could be re-established where practicable, and thereby adopting measures for the recovery and rehabilitation of threatened species and for their reintroduction into their habitat under appropriate conditions.
8. The Principles of *Best Available Technology* and *Best Environmental Practice*: as defined by the Paris Commission regarding activities that affect biological and landscape diversity. Both access to and transfer of technology are essential elements for the attainment of the Strategy, and where possible to provide and/or facilitate access for, and transfer to others of, technologies that are relevant to the conservation and sustainable use of biological and landscape diversity.
9. The *Polluter Pays Principle*: costs of measures to prevent, control and reduce damage to biological and landscape diversity shall be borne by the responsible party, as far as possible and as appropriate.
10. The Principles of *Public Participation* and *Public Access to Information*: creating sufficient and active public support for measures regarding biological and landscape diversity by involving public and private landowners, the scientific community, and other individuals and civic groups using land and sea resources in decision-making processes, through media, and the inclusion of these topics in education programmes.

2.5 Strategic and operational framework

The *legal basis* for implementing action under the Strategy is found in existing and widely accepted international agreements and treaties such as the Convention on Biological Diversity, the Bern Convention (which in the Monaco Declaration was indicated as the main instrument for implementing the Convention on Biological Diversity in Europe), the Bonn and Ramsar Conventions, and the EU Habitats and Birds Directives.

The Strategy will seek to achieve its aims by:

- facilitating and supporting the exchange of experience on, and creation or further development of, National Biodiversity Strategies, Action Plans and Programmes as stipulated by the Convention on

Biological Diversity, and promoting a consistent approach and common objectives in all countries of Europe;

- using all other existing international and national legislation and policy, such as the EU Natura 2000 Programme, sectorial policy including agricultural, fisheries, transport, regional development and social policies, and implementing fully the EU Fifth Environmental Action Programme;
- facilitating, supporting and promoting the implementation of the existing international agreements and treaties.

The Strategy will also use a range of other mechanisms, in order to change how society thinks and works in relationship to biological and landscape diversity:

- *international and national market and trade policy*, which affects the sectors using the natural environment as a resource, including price support;
- *multilateral or bilateral funds*, used either directly for nature conservation, or for measures in other social and economic sectors interacting with the natural environment;
- *fiscal policy*, which can either stimulate or discourage the use of energy and natural resources;
- *financial policy*, which can promote sustainable economic benefits in different sectors;
- *initiatives and programmes*, aiming to preserve and strengthen regional cultural identity and traditions;
- *public awareness/participation*, such as education, training and public awareness campaigns, appropriate use of the mass media, and public-private-partnership in land ownership and land management.

The Pan-European Ecological Network will be the *operational framework* within which many of the strategic and priority actions will be taken. It is both a physical network through which ecosystems, habitats, species, landscapes and other natural features of European importance are conserved, and a coordinating mechanism through which the partners in the Strategy can develop and implement cooperative actions. It will build on a variety of existing initiatives, including Natura 2000, the European network of Biogenetic Reserves, the EECNET concept, the Bern Convention, the Bonn Convention, and the many national and regional ecological networks already under development.

2.6 Actors to be mobilized

Main actors who will be involved in the implementation of the Strategy will include:

- national authorities (local, regional and national governmental authorities);
- bilateral donors;
- international organizations and financial institutions;
- organizations and associations active in the economic sectors, and private enterprise;
- research community (research institutes, universities, researchers and scientists);
- information dissemination organizations (including museums, zoos and botanic gardens), as well as the educational systems at every level;

- private and public landowners;
- non-governmental organizations (including nature conservation and environmental protection bodies at the local, national and international level);
- public (grassroot and citizen groups, consumer organizations, churches and religious groups/orders, recreational and sports associations);
- indigenous and native peoples of the regions of Europe.

2.7 Structure for Action Plans

The Strategy is intended to operate within a 20-year period, setting a broad and consistent framework for achieving the Strategic aims and objectives and giving guiding principles for action. Actions are to be implemented by dividing the Strategy into five year Action Plans which stimulate conservation and sustainable use activities and ensure concerted and integrated action by international and national actors.

The Action Plans are to provide a framework which contributes to a common European response to the Convention on Biological Diversity and in particular the National Biodiversity Strategies.

The Action Plans identify the fundamental actions towards the realization of each set of five year goals. These actions can be fully elaborated into projects which can be undertaken by international agencies, government authorities, economic sectors or NGOs as separate, individual or stand-alone activities, either because they fall within the National Biodiversity Strategies, within their own existing work programmes or actions can be initiated in direct response to the Strategy Action Plan. By thus linking in to existing initiatives and work programmes, a coherent spectrum of projects is executed, fitting within the framework of the Strategy.

Projects developed within the framework of the Action Plans will be innovative, proactive, cross-sectorial, achievable within a five year time frame and acceptable to/involving the public. Project outlines will incorporate concrete activities, time frame, funding mechanisms, costs and actors, and instruments including incentives. The opportunity should be taken to examine existing sources of funding with a view to supporting the implementation of the Action Plans.

Prioritization into Action Plans will be based on the following criteria:

1. Need to address urgent issues.
2. Possibility to take advantage of unique opportunities.
3. Potential to ensure concrete action and produce results within a set time frame.
4. Need to undertake activities in a structured and coordinated sequence.

CHAPTER 3 ACTION PLAN ON BIOLOGICAL AND LANDSCAPE DIVERSITY 1996-2000

3.1 Introduction

This Action Plan is the basis for the short term implementation of the Strategy. It identifies the actions to be undertaken between 1996 and 2000. At the end of this period, there will be a review leading to the initiation of a new Action Plan for a further five year period. The Action Plan uses the mechanisms laid down in the Strategy. The actions in the Plan are targeted towards the 20 year Strategic Aims and Objectives, and strive to incorporate the Strategic Principles in all relevant economic and social sectors.

Strategy Aims and Objectives

Aims

1. Threats to Europe's biological and landscape diversity are reduced substantially, and, where possible, removed.
2. Resilience of European biological and landscape diversity is increased.
3. Ecological coherence of Europe as a whole is strengthened.
4. Full public involvement in conservation of biological and landscape diversity is assured.

Objectives

1. Conservation, enhancement and restoration of key ecosystems, habitats, species and features of the landscape through the creation and effective management of the Pan-European Ecological Network.
2. Sustainable management and use of the positive potential of Europe's biological and landscape diversity through making optimum use of the social and economic opportunities on a local, national and regional level.
3. Integration of biological and landscape diversity conservation and sustainable use objectives into all sectors managing or affecting such diversity.
4. Improved information on, and awareness of, biological and landscape diversity issues, and increased public participation in actions to conserve and enhance such diversity.
5. Improved understanding of the state of Europe's biological and landscape diversity and the processes that render them sustainable.
6. Assurance of adequate financial means to implement the Strategy.

3.2 Action Plan focus 1996-2000

The first five year Action Plan specifically sets out to remedy the deterioration in the state of the key biological and landscape systems, and to strengthen the coherence of these systems. Particular focus for this period will be on integrating Pan-European priorities into national policy and initiatives based on the national biodiversity strategies, programmes and plans each government will set up to implement the Convention on Biological Diversity. The Action Plan will stimulate the development of national ecological networks and the realization of a Pan-European Ecological Network in 10 years. In addition, focus will be on promoting sustainable use of the natural environment's economic resources in all regions of Europe. Maximum use is made of unique opportunities being offered by current social, political and economic developments in Europe on the national and international level.

Within the 1996-2000 period, the Council of Europe should establish a Pan-European Task Force to set up and steer the Strategy process, prioritizing between and within the action themes. The Action Plan will consist of 11 action themes: 4 addressing issues of Pan-European importance, 6 addressing priority landscapes and ecosystems, and 1 introducing action for threatened species. The prioritization of these issues, landscapes, ecosystems and species for the 1996-2000 period is based on an analysis of *Europe's Environment: The Dobriř Assessment* report.

3.2.1 Action themes focusing on Pan-European issues

The Action Plan 1996-2000 identifies three priority issues which require a coordinated approach between European countries, based on the Strategy Objectives:

Action Themes:

1. Establishing a Pan-European Ecological Network (Strategy Objectives 1-5).
2. Integration of biological and landscape diversity considerations into sectors (Strategy Objectives 1-5).
3. Raising awareness and support with policy makers and the public (Strategy Objectives 4 and 5).

3.2.2 Action Themes focusing on landscapes, ecosystems and species

Action will take place throughout all regions of Europe, but will be focused on the landscapes and ecosystems that are of Pan-European intrinsic value.

Landscapes of European significance: Within Action Theme 4, action will be targeted towards landscape diversity important in the European context. In particular, emphasis will be on ensuring adequate protection of cultural and geological heritage features as well as natural elements.

Action Theme:

4. Conservation of landscapes (Strategy Objectives 1, 4 and 5).

Ecosystems and species of European significance: Actions relating to *priority ecosystems and species* are based on Strategy Objectives 1, 2 and 3. Actions within Themes 5 to 11 are important components of Action Themes 1 to 4.

Action Themes:

- | | |
|---|---------------------------|
| 5. Coastal and marine ecosystems. | 8. Grassland ecosystems. |
| 6. River ecosystems and related wetlands. | 9. Forest ecosystems. |
| 7. Inland wetland ecosystems. | 10. Mountains ecosystems. |

Action Theme:

11. Action for threatened species (Strategy Objectives 1, 2 and 3).

A full justification of the criteria on which this prioritization is based is listed in Annex 2.

3.2.3 Focus on socio-economic sectors

The actions for 1996-2000 will specifically address the integration of biological and landscape diversity into the key sectors impacting on the natural environment: agriculture, forestry, energy, industry, transport, tourism, water management, defence and fisheries. The Action Plan will strive to integrate biological and landscape diversity into all these sectors but specifically addresses agriculture and rural economy, as throughout Europe it is the sector most directly interacting with biological and landscape diversity. Furthermore agricultural policy and practice is currently undergoing change which offers the greatest opportunities for action towards the Strategy's overall aims.

3.3 Mechanisms to use in the Action Plan

The following instruments and mechanisms will be applied in actions under the Action Plan 1996-2000 (based on the complete list in Annex 2). In addition, more specific mechanisms will be applied, where relevant and possible, to or within the sectors, issues, landscapes, ecosystems or species:

- **legal and policy instruments:** In implementing the four Action Plans under the Strategy, full use will be made of four already existing and widely accepted international agreements: the Convention on Biological Diversity, the Bern Convention, and the EU Birds Directive (79/409/EEC) and Habitats Directive (92/43/EEC). In addition, the Action Plan will use the potential of the Bonn Convention, World Heritage Convention, CITES, Ramsar Convention, European Cultural Convention, European Convention for the Protection of the Archaeological Heritage and the European Convention for the Protection of the Architectural Heritage and the Environmental Impact Assessment Directive;
- **national and international programmes and actions striving** towards protecting biological and landscape diversity or sustainable use of natural resources, of which the Habitats Directive will be most important in a European Union context. Other relevant mechanisms and principles are: Council of Europe European Conservation Strategy, Council of Europe Diploma Sites and Biogenetic Reserves, Council of Europe Draft Recommendation of the Committee of Ministers to Member States on the Integrated Conservation of Cultural Landscape Areas as part of Landscape Policies, Council of Europe Draft Landscape Charter, Mediterranean Landscape Charter, UNECE Environmental Programme for Europe, EECONET, IUCN European Programme and Action Plan for Protected Areas, IUCN/UNESCO Communication Strategy for Europe, CORINE and the MAB Programme, and land purchase in the interest of nature conservation;
- **international and national market and trade policy:** bilateral and multilateral trade agreements, debt conversion, World Trade Organization (WTO) and its Committee on Trade and Environment;
- **multilateral or bilateral funds and other forms of assistance:** programmes of OECD countries for bilateral aid, Global Environment Facility, European Investment Bank, European Bank for Reconstruction and Development, World Bank, Council of Europe Social Development Fund, and EU measures such as LIFE, Cohesion Fund, Structural Funds, EU Agri-Environment Measures, Fourth Framework Programme for Research and Technological Development, European Social Fund, technical assistance, training and exchange programmes of multilateral and bilateral bodies.

3.4 Actions and projects

Based on the Strategy objectives, a series of actions have been identified in the Action Plan 1996-2000. They may fall within National Biodiversity Action Plans or the existing work programmes of international organizations, government authorities, economic sectors or NGOs and therefore can be elaborated into projects, and be undertaken by these organizations as separate, individual or standalone activities, while still contributing towards the realization of the Action Plan 1996-2000. Prioritization in the Action Plan has been based, among other sources, on the responses and policy options indicated in the *Dobříš Assessment* and the IUCN *Parks for Life: Action for Protected Areas in Europe*.

Action Themes 1996-2000

0. Pan-European action to set up the Strategy process
1. Establishing the Pan-European Ecological Network
2. Integration of biological and landscape diversity considerations into sectors
3. Raising awareness and support with policy makers and the public
4. Conservation of landscapes
5. Coastal and marine ecosystems
6. River ecosystems and related wetlands
7. Inland wetland ecosystems
8. Grassland ecosystems
9. Forest ecosystems
10. Mountain ecosystems
11. Action for threatened species

3.5 Action Plan 1996-2000

ACTION THEME 0 PAN-EUROPEAN ACTION TO SET UP THE STRATEGY PROCESS

To facilitate the actions and ensure that progress continues, a Pan-European Task Force will be required for steering and coordination at the international level. However, wherever possible the Strategy will make use of existing structures, mechanisms and funds.

0.1 Develop a Pan-European Task Force for coordinating action under the Strategy (1996-1997)

The Task Force, under the auspices of the Council of Europe's CDPE, will undertake a minimum of initiatives to make the Strategy operational. The Task Force will seek representation from countries party to the Council of Europe, other European countries, international organizations including the European Union, United Nations bodies such as UNDP, UNECE, UNEP, UNESCO and FAO, the World Bank, donors and international NGOs.

0.2 Assist introduction of National Biodiversity Strategies and Action Plans in all countries of Europe by the year 2000 (1996-2000)

Guidelines for Contents for a National Biodiversity Action Plan (Convention on Biological Diversity)

1. Executive summary - Briefly summarize the action plan report, stating succinctly the importance of biodiversity, the commitment to the Convention, the mandate, the participants list, the biotic wealth and national capacity, the goals and gaps, strategic recommendations, and characteristics of the action (who will do what, when, where, with what means and funding).
2. Introduction - Describe why biodiversity is important to the country and its local communities. Explain the Convention and the nation's commitment to its provisions. Present the aim of the national biodiversity action plan and specify to whom it is directed.
3. Background - Describe the legal and policy framework that provides the mandate and instructions for preparing the action plan report. Provide a short summary of the nation's biotic assets, capacity (human resources, institutions, facilities, and funding), and ongoing programmes. Explain the institutional

- arrangements and responsibilities so people will know how the strategic recommendations will be implemented.
4. Goals and Objectives - State the vision for biodiversity and its place in the society, focusing on its protection, on scientific understanding, on sustainable use, and on the equitable sharing of its benefits and costs. The specific targets to meet the national, local, and international goals in terms of protecting, assessing, utilizing, and benefiting from biodiversity and its components.
 5. Strategy - Summarize the gaps between the current situation in the country and the stated vision, goals, and objectives. Summarize the strategic recommendations, including the activities, policies, and tasks that have been selected for implementation to cover the gaps. Give relative priorities for each.
 6. Partners - Describe the public and private entities, communities, and industries that have participated in the process and have agreed to take responsibility for particular activities and investments.
 7. Action - Present the detailed activities, tasks, and policies to be implemented. Explain which partner (ministry, industry, indigenous group, NGO, or university) will implement each item, where, and what measures the partners will employ.
 8. Schedule - Present a timetable for the implementation of the various tasks, reflecting the priorities that have been assigned. Note signposts to help signal progress or delay.
 9. Budget - Provide the budget for the plan of action, showing funding requirements for operating expenses, capital purchases, transport, and field costs. List the personnel needed by category or skill or background, the facilities and services required, and possible international technical and financial cooperation.
 10. Monitoring and Evaluation - Explain the measures to be used for tracking the results of the action plan and for monitoring changes in the economy, environment, and society. Give the indicators that will be used. Present the individuals and organizations who will carry these responsibilities and how they were selected. Note the audience for the reports, along with the document's content and timing of implementation.

Based on the UNEP Guidelines for the Preparation of National Biodiversity Strategies and Action Plans (1994)

0.3 Applying the lessons of the EU Habitats Directive and the Bern Convention (1996-2000)

Share with all countries of Europe the benefits from the Habitats Directive (*Natura 2000*) and the Bern Convention as a guiding framework for an integrated European approach. Investigate the possibilities of, and the mechanism needed for, the application of the *Natura 2000* network in the CEE countries and other candidate Member States. Where applicable prepare introductory guidelines and other forms of support. Initiate action to maintain and extend the CORINE Programme to cover all European countries, focusing on elaboration of CORINE Biotopes and designated areas. Devise a European-wide checklist of species and habitats.

Examples of National Biodiversity Strategies from central and eastern Europe (CEE) and western Europe

Conserving Biological Diversity in Bulgaria: The National Biodiversity Conservation Strategy: This strategy is based on the expert contributions and recommendations of Bulgarian scientists, representatives of Bulgarian ministries, committees, regional authorities, municipalities and NGOs, as well as specialists in protected areas planning, natural resource economics, environmental law, regional planning and geographic information systems.

The strategy incorporates more than 150 recommendations into a seven-part framework, providing the basis for integrated conservation planning and project development. It is divided into five chapters: The Conservation Challenge, Bulgaria's Biological Diversity, Threats to Biological Diversity in Bulgaria, Developing a Comprehensive Conservation Program, Priorities for Immediate Action and Support.

Appendices include Internationally Significant Protected Areas and other Natural Areas in Bulgaria, Workshop Papers, Sources of Information and Assistance, Data Sets Incorporated into Composite and Gap Analysis Maps.

The Biodiversity Support Program (BSP), a USAID-funded consortium of WWF, The Nature Conservancy, and World Resources Institute, with funding from the USAID Bureau for Europe and Newly Independent States, provided technical assistance to the Government of Bulgaria to help assemble a comprehensive base of information about Bulgaria's biological diversity and to develop consensus on priorities and recommendations for biodiversity.

The UK Biodiversity Action Plan: Its overall goal is to conserve and enhance biological diversity within the UK, and to contribute to the conservation of global biodiversity through all appropriate mechanisms. Many policies and programmes are already in place to conserve UK wildlife and habitats. The Government recognizes that further work is needed to achieve the UK's conservation goals over the next 20 years. Chapter 10 of the Biodiversity Action Plan sets out a list of actions, to which the Government and its agencies are committed, to conserve and, where practicable, enhance wild species and wildlife habitats. To ensure this work is focused to the best advantage, the Government has established a Biodiversity Action Plan steering group with representatives drawn from central and local government agencies, institutions holding significant collections of materials, voluntary organizations and academic bodies. Its immediate overseeing remit is:

- the development of a range of specified costed targets for key species and habitats for the years 2000 and 2010, to be published in the European Nature Conservation Year 1995;
- a working group, established in June 1993, designed to improve the accessibility and coordination of existing biological databases, to provide common standards for future recording, and to examine the feasibility in due course of a single UK Biota Database;
- the preparation and implementation of a campaign to increase public awareness of, and involvement in, conserving UK biodiversity;
- establishment of a review process for the delivery of commitments, set out in Chapter 10 of the Biodiversity Action Plan.

ACTION THEME 1 ESTABLISHING THE PAN-EUROPEAN ECOLOGICAL NETWORK

Challenges to be addressed: The Strategy seeks to conserve ecosystems, habitats, species, their genetic diversity, and landscapes of European importance through the development of the Pan-European Ecological Network within 10 years.

The Pan-European Ecological Network will contribute to achieving the main goals of the Strategy by ensuring that a full range of ecosystems, habitats, species and their genetic diversity, and landscapes of European importance are conserved; habitats are large enough to place species in a favourable conservation status; there are sufficient opportunities for the dispersal and migration of species; damaged elements of the key systems are restored and the systems are buffered from potential threats.

Opportunities to be considered: Existing ecological network initiatives focusing on legal processes such as Natura 2000 under the Habitats and Birds Directives, the Bern, Bonn and Ramsar Conventions, Council of Europe Biogenetic and Diploma Sites and guiding principles such as EECONET; make use of unique opportunities such as land use changes as a result of privatization and EU Agri-Environmental Measures in Europe, and the Maastricht Declaration on *Conserving Europe's Natural Heritage: towards a European Ecological Network* (1993), and the IUCN *Parks for Life: Action for Protected Areas in Europe*.

The Pan-European Ecological Network

The network will be built up from the following elements: core areas to conserve ecosystems, habitats, species and landscapes of European importance; corridors or stepping stones, where these will improve the coherence of natural systems; restoration areas, where damaged elements of ecosystems, habitats and landscapes of European importance need to be repaired or certain areas completely restored; buffer zones, which support and protect the network from adverse external influences. The core areas will comprise the main areas and features that represent biological and landscape diversity of European importance. They will in many cases also include important semi-natural systems which are dependent for their integrity on the continuation of certain human activities, such as extensively used agricultural landscapes.

The coherence of the network will be ensured through the provision where appropriate of continuous corridors or discontinuous "stepping stones" which will facilitate the dispersal and migration of species between the core areas. In many cases the connectivity function of corridors and stepping stones will be compatible with appropriate forms of economic activity in the respective areas.

The three priority actions are designed to ensure that the Pan-European Ecological Network can be designed and implemented within 10 years.

1.1 Establish a development programme for the Pan-European Ecological Network (1996-1999)

The development programme for the Pan-European Ecological Network will design the physical network of core areas, corridors, restoration areas and buffer zones. The programme will include the following actions: a) the elaboration of the criteria on the basis of which the network of core areas, corridors, restoration areas and buffer zones will be identified, taking into account the biogeographical zones of Europe; b) the selection of the ecosystems, habitat types, species and landscapes of European importance; c) the identification of the specific sites and corridors by way of which the respective ecosystems, habitats, species and their genetic diversity, and landscapes of European importance will be conserved and, where appropriate, enhanced or restored; d) the preparation of guidelines that will ensure that actions taken to create the network are as consistent and effective as possible.

These actions will make full use of and build on the many existing initiatives throughout Europe that are

currently contributing to the development of ecological networks, in particular the Habitats Directive, the IUCN *Parks for Life: Action for Protected Areas in Europe* and the many national and regional ecological networks already under development. A wide range of governmental and non-governmental organizations will contribute to the design and implementation of the development programme.

Natura 2000, the European Ecological Network in the European Union

A coherent European Ecological Network of Special Areas of Conservation (SAC) is being set up under the title of Natura 2000 by each of the EU Member States (as defined in Habitats Directive (92/43/EEC Article 3). This network, composed of sites hosting the natural habitat types and species listed in the Habitats Directive Annex I and II, will enable the natural habitat types, and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range.

Each EU Member State contributes to the creation of Natura 2000 in proportion to the representation within its territory. To that effect each EU Member State designates, in accordance with Article 4, sites as Special Areas of Conservation. Where they consider it necessary, EU Member States will endeavour to improve the ecological coherence of Natura 2000 by maintaining and, where appropriate, developing features of the landscape which are of major importance for wild fauna and flora.

Furthermore, EU Member States endeavour, where they consider it necessary, in their land use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora (Article 10).

Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.

1.2 Develop the first phase of an implementation programme for the Pan-European Ecological Network (1996-2000)

The development programme for the Pan-European Ecological Network will be supported by the preparation of an implementation programme. The implementation programme will set out the actions that will be necessary to ensure that the Pan-European Ecological Network is created by 2005.

The first phase of the implementation programme will focus on the priority actions that need to be taken in the period up to 2000. Because of the many initiatives for developing ecological networks that are already under way in Europe (such as Natura 2000 and the varied national and regional ecological network initiatives) the first implementing actions can be planned in parallel with the preparation of the development programme. These actions will include appropriate demonstration projects and will particularly take into account the actions being carried out to develop Natura 2000 and the special needs of central and eastern Europe.

The design and implementation of the programme will be executed in close collaboration with relevant governmental and non-governmental organizations.

1.3 Stimulate the development of national ecological networks and their linkage with the Pan-European Ecological Network (1996-2000)

Ecological networks are being developed in a large number of European countries. These networks can make an important contribution to both the design of the Pan-European Ecological Network and its

implementation at the national and regional level. The priority actions will take the form of project support to initiatives that will demonstrably contribute to the development of ecological networks throughout Europe, especially where these will reinforce the development and implementation of the Pan-European Ecological Network. The support will be directed in particular to the provision of technical assistance and to collaborative ventures involving transboundary networks. Funding will be provided through a variety of mechanisms: national, bilateral, multilateral and private sponsorship.

1.4 Promote awareness of the Pan-European Ecological Network

Provide opportunities for exchange of expertise between countries in Europe on effective education and communication policies, with emphasis on the Pan-European Ecological Network, national ecological networks and the integration policies (1996-2000).

ACTION THEME 2 INTEGRATION OF BIOLOGICAL AND LANDSCAPE DIVERSITY CONSIDERATION INTO SECTORS

Challenges to be addressed: The maximum integration of biological and landscape diversity conservation and its sustainable use into all economic and social sectors.

Opportunities to be considered: Ongoing or future need to consider, where appropriate, reformulation of sectorial policies, focusing on those currently in reform. Use provisions of the Convention on Biological Diversity (Articles 6b, 7c, 10a and b, 14), the Treaty of Maastricht (Articles 2 and 130 R(2)), the EU Intergovernmental Conference in 1996, the Structural Funds, the Cohesion Fund and the EU White Paper on Growth, Competitiveness and Employment, and the UNECE Environmental Action Plan for Central and Eastern Europe to focus on the protection and enhancement of biological and landscape diversity in sectors affecting or managing biodiversity. Use the potential of the EU Fifth Environment Action Programme and the Council of Europe Social Development Fund to increase enhancement of biological and landscape diversity interests in economic and social sectorial policy in the European Union and its activities throughout Europe.

Focus on Pan-European objectives:

- 2.1 Invite each sector (agriculture, water management, forestry, energy and industry, transport, tourism, fisheries, defence, structural and regional policies, urban and rural planning), where appropriate and practicable, to present, in cooperation with the biodiversity conservation authority, its own biodiversity plan within the agreed time frame (1996-2000).

The action will take the following steps: description of activities; description of impacts on biodiversity, both negative and positive; description of the value of biodiversity for own sector; goals incorporating the goals of the Strategy and national biodiversity goals set by the competent national authority; actions to be taken, using the means that the sector has at its disposal; follow-up.

At the regional level, examine the consequences for biological and landscape diversity of the possible introduction of EU policies in candidate EU member states, focusing on the CEE countries and Mediterranean.

- 2.2 Promote management of ecological refugia in agricultural environments.
- 2.3 Influence appropriate use of funding mechanisms.

Project funding criteria under development funds should be reviewed, and where necessary amended, to ensure that the funds can contribute to nature conservation objectives (1996-2000).

Other objectives should be to improve the quality of environment impact assessments and to review legislative requirements under the EU Structural Funds and Cohesion Funds, PHARE/TACIS, EBRD, World Bank and other funding programmes.

- 2.4 Ensure that privatization processes incorporate adequate safeguards for biological and landscape diversity.

Example of integration in the CEE and western Europe: Norway

The basic approach in the Norwegian follow-up of the Convention on Biological Diversity (ratified by Norway July 1993), has been to combine the two major obligations in Article 6 into one, integrated process.

Article 6 (a) states that contracting parties shall develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity. Article 6 (b) states the obligation to integrate the conservation and sustainable use of biological diversity into relevant sectorial or cross-sectorial plans. Sector-responsibility with regard to biodiversity is therefore one of the basic foundations of the Norwegian strategy. The other key-issue in the process has been public participation. To achieve these objectives, the strategy is - under the coordinating responsibility of the Ministry of Environment - being built up through the following process:

1. A descriptive phase, based on existing knowledge, covering the *status quo* of biological diversity in Norway, activities affecting biological diversity, and an identification of gaps in knowledge and research needs.
2. A phase of developing strategies for action, resulting in a "National Action Plan", carried out in three steps:
 - a) Each ministry responsible for activities affecting biodiversity, or for activities concerning conservation or sustainable use of biodiversity, prepared a "sector-plan for biodiversity", based on agreed guidelines drafted by the Ministry of Environment. As part of the plan, each ministry was asked to identify the basis for action. In order to reach the objective of making each sectorial ministry identify concerns of biological diversity as their concerns, the guidelines reversed the usual order of things: while normally an identification of biological diversity would come first, and threats to this diversity thereafter, the sectorial ministries were instead asked to describe their activities first: by going through the activities, effects on biodiversity, both negative and positive, are logically brought forward. Moreover, goals and proposals for action can be linked up to concrete activities. The following seven ministries finished their drafts for sector-plans in June 1994: Ministries of Fisheries, Agriculture (which includes Forestry), Transportation, Energy and Industry, Defence, Research and Education. In addition, the Ministry of Environment also sent out its sector-plan, containing this ministry's activities, instruments, goals and proposals for action. Each sector-plan includes proposals for goals to be reached and measures to be taken, and necessary instruments (both legal and economic) to be established.
 - b) The sector-plans were circulated for broad public consultation, thereby including NGOs and the private sector in the process.
 - c) After the public consultation, a coordinated, cost-effective and ecologically effective conservation policy was subsequently drawn up, based on the sector-plans and the results of the public consultation. The Government would decide upon and thus be responsible for the action plan. The Parliament then receives the action plan for a broad political consideration.
3. After the finalization of the plan, stages of implementation and revision within regular periods (of both sector-plans and the coordinated total plan) will follow.

The strategic approach taken by the Norwegian Government combines several aims. The overall goal is to implement the CBD at the national level. The main objective, therefore, is the conservation and sustainable use of biological diversity. On the underlying level, however, several other objectives can be identified:

- the integration of existing activities which already fulfil certain objects of the Convention, in an overall strategy;
- to start a dynamic process for implementation, rather than just drafting yet another "document";
- the full involvement of all sectors in this process, and an attempt to ensure that sectors identify problems as their responsibility, while at the same time raising awareness and building capacity within the sectors through the process;
- the incorporation of the aspect of biological diversity into all significant decision-making processes.

Example of integration in the CEE and western Europe: Poland

The policy of sustainable development for Poland was approved by the national parliament in 1991. In respect of biological diversity, the strategy for the protection of living natural resources was also elaborated in 1991. The main aims of the National Biodiversity Strategy are based on system analysis of threats to biota, alternative measures which should be applied in agricultural landscapes, forests, grasslands, wetlands, hydrological systems as well as in economical activities of the country. The recent development in ecological principles concerning management of ecosystem and landscape natural functions were used for the proposed strategy. The programme of the strategy implementation was elaborated including measures for an expanded ecological network of protected areas, developed since the beginning of the 1980s. The ecological network is composed of 20 national parks, 69 landscape parks, more than 1,000 reserves and smaller protected areas. Recently two very important new initiatives for integration of biodiversity protection with economic activity were developed. The first one concerns the so called "Green Lungs of Poland" in the north-eastern part of the country where, in an area of 46,000 km², a programme for biodiversity and landscape protection has been combined with organic farming, eco-tourism, recreation and a revival of traditional craft activities. International extension of this initiative was signed by Belarus, Latvia, Poland, Russia and Ukraine in March 1992.

The second important initiative seeking integration of biological and landscape diversity conservation with economical activity is the Agro-ecological Landscape Park model launched in 1992. In an area of 16,000 hectares located in Wielkopolska Region (western-central Poland), the agricultural landscape was designed by the introduction of shelter belts (windbreaks) in the previous century. This natural heritage has been used to integrate agricultural activity with biological and landscape diversity protection and management, by incorporating mosaics of agricultural landscape, characterized by small fields, shelter-belts, stretches of meadows, small ponds in fields and marshes showing very high biological diversity (more than 800 plant species as well as a rich fauna). In this area, agricultural production continues to be high while ensuring the maintenance of a high level of biodiversity, thereby the water regime improved for agricultural production and the control of diffuse pollution enhanced.

ACTION THEME 3 RAISING AWARENESS AND SUPPORT WITH POLICY MAKERS AND THE PUBLIC

Challenges to be addressed: To involve the civic community and the public in a meaningful way, so that they are well informed about biological and landscape diversity and its relationship with social and economic quality of life, thereby ensuring a greater role of these considerations in decision making processes and greater public involvement. Generate understanding and acceptance that in some cases, there might be incompatibility of biological and landscape diversity conservation with economic growth.

Opportunities to be considered: Increased interest to develop individual and collective responsibility amongst Europeans to prevent further loss of biological and landscape diversity, to maintain and where possible work to restore diversity. Naturopa, IUCN/UNESCO Working Group on National Strategies for Environmental Education and Communication, REC. There is growing potential for citizen participation in decision making processes as a consequence of social and political changes throughout Europe and increased recognition of subsidiarity.

Focus on Pan-European objectives:

3.1 Develop a Pan-European public awareness and support campaign on biodiversity and landscape conservation. This process will build upon the Council of Europe campaign European Nature Conservation Year 1995, and make use of the increased awareness generated by this event (1996-2000).

- Improve networks between communication and education personnel working for biological and landscape diversity in protected areas, community based initiatives, museums, botanic gardens, zoos and local education centres. Address also better presentation of issues through media, schools and universities, training programmes, publicity campaigns, exhibitions in museums, schools, zoos and botanic gardens, and through the use of information technology (1998-2000).
- Devise actions to encourage and assist governments and others to develop or improve national/regional education and communication strategies related to the inter-sectorial policy issues on biodiversity.

Within such strategies and according to the changes in practice required, key target groups will be identified and programmes developed.

3.2 Secure improved opportunities for the general public to become aware of the importance of areas of high natural and landscape value.

Focus on regions:

3.3 Establish capacity building and information services at the regional level with priority focus to:

- Establish a support programme for citizen groups to encourage active participation in conserving biological and landscape diversity of the CEE countries in the North European Plain and the Black Sea areas (1996-1999).
- Develop an action plan to encourage educational programmes leading to good stewardship of biological and landscape diversity in countries where land management systems are changing (1996-1998).
- Establish a training, education and funding programme to give support to citizen groups in their active participation in conserving biological and landscape diversity in the Mediterranean region (1997-2000).

ACTION THEME 4 CONSERVATION OF LANDSCAPES

Challenges to be addressed: To prevent further deterioration of the landscapes and their associated cultural and geological heritage in Europe, and to preserve their beauty and identity. To correct the lack of integrated perception of landscapes as a unique mosaic of cultural, natural and geological features and to establish a better public and policy maker awareness and more suitable protection status for these features throughout Europe.

Opportunities to be considered: Cultural and social commitment to maintaining local and regional individuality as expressed by cultural and geological heritage features in the landscape. Opportunities abound to restore many of these features such as traditional field and landscape patterns, using existing policy and measures. Public and private landowner participation and partnerships offer immediate opportunities to ensure conservation of landscapes, cultural and geological heritage. Treaty of Maastricht (Articles 92(3) and 128), Council of Europe Draft Recommendation on the Integrated Conservation of Cultural Landscape Areas as part of Landscape Policies, Council of Europe Draft Landscape Charter, European Convention on Archaeological Heritage, European Convention on Architectural Heritage, Mediterranean Landscape Charter, IUCN *Parks for Life: Action for Protected Areas in Europe*, National town and country planning mechanisms, Digne Declaration (ProGeo).

Focus on Pan-European objectives:

- 4.1 Compile a comprehensive reference guide on European biological and landscape diversity to further develop and seek acceptance of criteria to identify priorities for conserving geological and cultural landscape features, and list threatened landscapes and geological sites of Pan-European significance and identify most suitable mechanisms for their conservation; identify traditional agricultural and related landscape management types, and assess the effect of marginalization or intensification on the landscape (1996-1997).
- 4.2 Establish guidelines following assessment and evaluation to address policies, programmes and legislation for the protection of cultural heritage, of geological heritage and of biological diversity that are mutually supportive and complementary, and use them to their full potential in the conservation of the landscape (1996-2000). Particular emphasis will be to review options to:
 - Encourage countries to adopt and implement initiatives under the Council of Europe Draft Recommendation of the Council of Ministers to Member States on the Integrated Conservation of Cultural Landscape Areas as part of Landscape Policies (CDCC-BU(95)7) (1996-1998).
 - Develop mechanisms to promote involvement of existing international protected area processes in Europe, including World Heritage Sites, Biosphere Reserves and European Diploma Sites, in the conservation of landscapes and geological features (1996-2000).
- 4.3 Set up a Code of Practice to involve private and public landowners to promote awareness of the relevance for biodiversity of landscapes traditionally valued and managed for their historical and cultural importance, focusing on historic parkland estates and historic buildings (1996-1998).
- 4.4 Establish an action plan using awareness techniques, guidelines and demonstration models to safeguard geological features in the landscape, actively involve and consult landowners and the energy, industry and water management sectors in their conservation (1996-1998).
- 4.5 Investigate the relationship between traditional landscape and regional economy. Develop a framework to stimulate initiatives for regional development based on landscape diversity, involving eco-tourism and traditional crafts. Find successful case studies and set up programmes for exchange of expertise (1996-2000).

ACTION THEME 5 COASTAL AND MARINE ECOSYSTEMS

Challenges to be addressed: Direct loss through development and occupation of coastal areas for residential, touristic and industrial purposes, reclamation, dams and dikes, coastal engineering, pollution, destruction and over-exploitation of benthic systems through industrial fishing practices, destruction of sedimentary systems through mining and drinking water production, and recreational disturbance.

Opportunities to be considered: Ongoing discussion on EU Common Fisheries Policy in a Pan-European context. The FIFG instrument of the EU, UN Convention on the Law of the Sea, Oslo and Paris Conventions, MARPOL Convention, Convention on Climate Change, Helsinki Convention, Barcelona Convention, Black Sea Convention, and Ramsar Convention. Other international initiatives for the coastal environment include: Council of Europe Resolution on the Protection of the Coastal Areas (1973), European Coastal Charter CPMR (1981), Recommendation of the Council of Europe on salt marshes and coastal dunes (1985), Nicosia Declaration of Euro-Mediterranean Cooperation in the field of the Environment, Convention on Transboundary Rivers and Lakes, Resolutions of the European Environment Council on the future Community policy concerning the European coastal zone (1992, 1994), Ministerial Declaration on the Sixth Trilateral Governmental Conference on the Protection of the Wadden Sea, European Coastal Conservation Conference Declaration, EUCC Development of the "Coastal ecological network" concept (1991), and IUCN *Parks for Life: Action for Protected Areas in Europe*.

Focus on Pan-European objectives:

- 5.1 Develop and implement a European coastal and marine ecological network as a fundamental element of the Pan-European Ecological Network. Protect remaining coastal landscape systems through an ecosystems/habitats approach under the Natura 2000 network. The process will ensure the identification and safeguarding of areas of high biodiversity value, and creation of marine protected areas in order to protect the full variety of marine biodiversity, with additional measures to protect important species (1996-2000).
- 5.2 Develop an integrated coastal zone management approach to land and sea utilization, management and planning as one system, based on conservation considerations; in this way also long term processes can be taken into account (for example climate change and coastal retreat) (1996-1999).
- 5.3 Develop a special Coastal Code of Conduct, which provides clear recommendations and good practice to coastal authorities, project developers, coastal engineers and other user groups (1996-1997).

Focus on regions:

- 5.4 Initiate priority conservation action for coastal and marine systems that play an important role in maintaining the biological and landscape diversity of the biogeographical regions, focusing primarily on:
 - conservation of coastal heathland in northern Europe (1996-2000);
 - conservation of estuaries and intertidal areas in the Atlantic, Boreal and Baltic regions (1996-2000);
 - coastal dune/salt marsh systems in the Atlantic region (including machairs) (1996-2000);
 - lagoon-delta systems in the Baltic Sea region (1996-2000);
 - Mediterranean coastal wetlands, lagoon and delta systems (1996-2000);
 - Mediterranean islets and archipelagos of high biodiversity and landscape value (1996-2000).
- 5.5 Strengthen, establish and maintain priority conservation areas as key reproductive habitats for Monk seals and marine turtles in the eastern Mediterranean (1996-2000).
- 5.6 Establish action plan for the conservation of *Posidonia* seagrass prairies in the Mediterranean (1996-2000).
- 5.7 Assist in promoting coastal tourism policies, such as ecotourism, that concentrate on quality improvement

in existing resorts rather than on developing new ones in the Mediterranean and the Black Sea (1996-1997).

- 5.8 Assess methods to strengthen the position of biodiversity and landscape values in integrated models focusing on ensuring concentrated and compact rather than linear seafront development. Focus on campaigns in the Mediterranean, Black Sea and Baltic Sea (1996-1997).
- 5.9 Establish action towards control and elimination of harmful exotic species in the Mediterranean and Black Sea.
- 5.10 Assist in joint conservation action for the Caspian Sea.

ACTION THEME 6 RIVER ECOSYSTEMS AND RELATED WETLANDS

Challenges to be addressed: River regulation, hydro-electric works, river pollution, urbanization, excavation of sedimented sands and clays, agriculture, and water balance disruption in the catchment areas.

Opportunities to be considered: Western European policy towards flood control is being revised and provides major opportunities towards nature development or restoration in the entire catchment area. In CEE certain rivers are still largely semi-natural or natural. Convention on Transboundary Rivers and Lakes, Danube Delta Agreement, Convention on the Protection of the Rhine against Chemical Pollution, Rhine Action Programme, Danube Delta and River Global Environment Facility (GEF) Programmes of the World Bank, Ministerial Declaration on the Sixth Trilateral Governmental Conference on the Protection of the Wadden Sea, Meuse and Scheldt agreements and Convention on the International Commission for the Protection of the Elbe.

Focus on Pan-European objectives:

- 6.1 Develop an international programme of establishing and managing conservation areas and integrated management plans for rivers and their flood plains to enhance buffering riparian vegetation and their ecological corridor function, as part of the Pan-European Ecological Network based on successful international cooperative river management initiatives for entire river systems such as the Danube and Rhine (1996-2000);
- 6.2 Increase awareness and conservation of traditionally managed riverine landscapes and support tourism and regional economy, focusing on the Danube, Dessau, Mosel and Loire as role models to develop guidelines (1996-2000).

Focus on regions:

- 6.3 Set up conservation programmes to conserve the very few major natural rivers and semi-natural rivers with well developed natural elements which still exist in Europe (1996-2000). Give priority to the conservation of European rivers that play an important role in maintaining the biological diversity of the biogeographical regions, primarily to existing initiatives in the different regions focusing on, for example:
 - river systems in the Balkan peninsula;
 - Tisza river system in central Europe;
 - Bug river system in central Europe;
 - Ural river in eastern Europe;
 - Allier and Loire rivers in the Atlantic region;
 - Sava river system in the Mediterranean/central Europe;
 - Soca river system in Alpine/Mediterranean;
 - Vistula river system in central and eastern Europe;
 - Danube river system traversing regions of Europe;
 - remaining wild rivers in the Nordic region.
- 6.4 Set up and promote species reintroduction and habitat restoration projects, focusing on rivers in the Atlantic and Baltic regions (1996-1999).
- 6.5 Identify and protect all riverine forests and other habitats under threat in the Atlantic region of western Europe and promote adequate protection mechanisms (1996-2000).
- 6.6 Develop action plan to promote non-damaging alternatives to landscape and ecosystem loss from large water storing reservoirs and river diverting dams in the Mediterranean (1996-2000).
- 6.7 Initiate awareness campaigns of the least damaged major rivers in Scandinavia and the CEE (1996-1998).

ACTION THEME 7 INLAND WETLAND ECOSYSTEMS

Challenges to be addressed: Wetland drainage affecting wetlands of major importance in eastern Europe, including the Danube Delta and the Volga Delta, and in the Mediterranean region. Elsewhere habitat degradation is common, principally through: channelization and impoundment of water courses, drainage, peat extraction, eutrophication, acidification, pollution (such as pesticides, PCBs and heavy metals), destruction of riparian vegetation and habitats, aquaculture and disturbance from recreation, especially tourism and hunting.

Opportunities to be considered: Changes in land use and rural development policy and water management/flood control, Ramsar Convention, Convention on Transboundary Rivers and Lakes, Long-Range Transboundary Air Pollution Convention (1979) and the Oslo Protocol (1994) and Helsinki Protocol (1985); Convention on EIA in a transboundary context (1992); Ministerial Declaration on the Sixth Trilateral Governmental Conference on the Protection of the Wadden Sea; GEF programmes of the World Bank, EU Action on Wetlands, Agri-Environment Measures (EC Regulation 2078/92/EEC), EAGGF-Guarantee, Organic farming regulation 2092/91/EEC.

Focus on Pan-European objectives:

- 7.1 Prepare guidelines to support policies for the restoration and rehabilitation of wetland systems damaged by previous development so as to contribute and support ecological networks (1996-2000).
- 7.2 Establish Code of Conduct to ensure that conservation objectives are incorporated into policies affecting wetlands through the concept of wise use, as defined under the Ramsar Convention as the "sustainable utilization of wetlands for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem" (1996-2000). In the Code, focus will be on Pan-European objectives. It will recommend the establishment of demonstration models and training and:
 - Ensure integration of the wise use concept into sectorial policies for development and economic growth.
 - Ensure throughout spatial policy that the key principle of catchment planning is followed. This is essential if measures taken for species and habitat protection are not to be undermined by other activities or actions in other parts of the catchment.
- 7.3 Establish a programme on the integration of wise use of wetlands into European and national policies.
- 7.4 Undertake action to promote the preparation of national plans and regional plans on hydrological management of catchments, which are of utmost importance and ensure within spatial policy that land use development is in harmony with the characteristics of the wetlands (1996-2000).

Focus on regions:

- 7.5 Establish conservation action plans for threatened wetlands that play an important role in maintaining the biological and landscape diversity of the biogeographical regions (1996-2000), focusing primarily on:
 - blanket bogs in western Europe and Nordic region;
 - boreal raised bogs (Aapa, Palsa) in the Baltic and Nordic regions;
 - extensive wetlands that are the sources of the major Russian rivers;
 - wetlands that are a part of bird migration routes in the Mediterranean area and along the Atlantic coast;
 - sustainable water use in large zones around river sources in the Mediterranean;
 - tundra in northern and eastern Europe.
- 7.6 Assess the conservation importance of peat bogs, especially in relation to peat extraction and trade (1996-2000).

ACTION THEME 8 GRASSLAND ECOSYSTEMS

Challenges to be addressed: Intensification, drainage, irrigation, ploughing and the use of fertilizers and biocides; privatization, agricultural policy, land abandonment, intensification of grassland management, and regionalized socio-economic pressures.

Opportunities to be considered: Changes in land use policy and practice throughout Europe focusing on agricultural policy reform, privatization of land and regional development policies. Within the agricultural sector there are a number of legislative opportunities that are of actual or potential support for grassland ecosystems: Common Agricultural Policy reform (1992), including Agri-Environment Measures (EC Regulation 2078/92/EEC), EAGGF instrument, and the Organic farming regulation (2092/91/EEC).

Focus on Pan-European objectives:

- 8.1 Encourage the development of action plans for natural and semi-natural grasslands, and in particular those that are of outstanding importance and under pressure at a Pan-European level. Ensure that the grassland action plans contribute to the Pan-European Ecological Network (1996-2000).
- 8.2 Develop grassland agricultural management schemes supported by concrete measures on the basis of legal and financial opportunities, at the local, national and international level. Review grassland stewardship schemes and other opportunities to maximize land manager participation to ensure maintenance and expansion of landscape and grassland diversity. Establish case studies and exchange of expertise (1996-1997).
- 8.3 Give special attention to monitoring data gathering policy requirements of grassland and agricultural zones into the work programmes of environmental management authorities and research agencies (1996-2000).

Focus on regions:

- 8.4 Prioritize conservation of grasslands of high biological and landscape diversity in different types of grassland habitats as well as different biogeographical regions (1996-2000), focusing primarily on:
 - great bustard habitats in Iberia and eastern Europe;
 - wet and dry calcareous grasslands in Atlantic, central and eastern European regions;
 - extensively managed meadows/calcareous dry grass in the Alpine region;
 - steppe of central and eastern Europe and eastern Mediterranean;
 - grassland landscapes in the Dehesas of Iberia;
 - steppe of regions with indigenous conifers.
- 8.5 Request the development of an outline EU-vision and action plan for semi-natural grasslands, integrating regional development, agriculture, social and environmental policies; this vision, linked to Natura 2000, could be the basis for future options on CAP reform, trade policies such as the next WTO round and accession for new EU members. Furthermore request the development of a vision on land use in the EU in view of agricultural surpluses and production and change in afforestation needs (1996-2000).
- 8.6 Develop concrete action to apply successful mechanisms for maintaining extensively managed grasslands, using EU ESA-type tax incentives and land stewardship initiatives in the wider landscape (1996-2000).
- 8.7 Consider methodologies for the application of cross-compliance in the framework of the CAP reform to support biological and landscape diversity values. Prepare reports for the CAP revision process (1996-1998).
- 8.8 Develop public and private participation schemes in the privatization programmes of agricultural areas of the CEE and also in core areas to be protected; promote as case studies (1996-1998).

ACTION THEME 9 FOREST ECOSYSTEMS

Challenges to be addressed: Intensive silviculture/monoculture, atmospheric deposition, ground water depletion, forest fragmentation, forest burning, land reclamation and over-exploitation.

Opportunities to be considered: Financial incentives for recycling of natural forest resources. Changing land use across Europe including set aside lands, country estates, derelict military areas and privatization. In addition to regional development programmes there are specific instruments including: UNCED Forest Principles, Resolutions of the Ministerial Conferences on the Protection of Forests in Europe; Convention on EIA in a transboundary context (1992); Long-Range Transboundary Air Pollution Convention (1979), Nitrogen (NOx) Protocol (1988), Oslo Protocol (1994) and Helsinki Protocol (1985), EP resolution on European Forests (1994), annual reports on national state of forests in Europe.

Focus on Pan-European objectives:

- 9.1 Conserve adequate areas to secure the conservation of all types of forests in Europe, and specifically prioritize conservation efforts towards protection of 100 per cent of the remaining alluvial and virgin forests, the majority of the remaining ancient secondary woodland, and remaining riparian forest corridors, taking into account considerations of indigenous and local peoples (1996-1999).
- 9.2 Conserve forest habitats of species requiring large undisturbed forest ecosystems, including high profile Bern Convention, Habitats Directive and UNECE threatened species (1996-2000).
- 9.3 Devise and promote an action plan for biodiversity, landscape and ecological networking considerations to forest management and in the use of renewable forest products (Helsinki Resolution). Encourage national forest policies which will favour afforestation with native species to the extent practicable (1996-1997).
- 9.4 Initiate studies on the adjustment of European forests management systems in order to optimize adaptation to climate change, to ensure the health and multiple functions of existing forests, and to optimize the sequestration and storage of carbon, as well as studies on other matters referred to in Resolution 4 of the Helsinki Ministerial Conference on Protection of Forests in Europe, 1993 (1996-1998).
- 9.5 Initiate studies on the adjustment of European forest management systems (1996-2000).

Focus on regions:

- 9.6 Secure an effective network of protected areas to maintain the northern boreal forests (taiga) (1996-2000).
- 9.7 Strengthen sustainable management and protection of viable old growth forests in south-western and south-eastern Mediterranean regions to prepare case studies and ensure exchange of expertise in the process (1996-2000).
- 9.8 Identify and initiate restoration and regeneration plans of the most important fragmented forests of intrinsic value in CEE and Atlantic regions (1997-2000).
- 9.9 Establish a programme to assess and define action to conserve biological and landscape diversity as a consequence of privatization and/or market conditions impacting on sustainable forest management in the CEE (1996-1998).
- 9.10 Establish procedures to ensure greater collaboration with indigenous and local peoples for effective sustainable management of forests for economic and cultural/biological diversity use in the Arctic, Boreal and CEE regions (1996-1998).

ACTION THEME 10 MOUNTAIN ECOSYSTEMS

Challenges to be addressed: Vulnerability to changes in the social or economic sectors, economic competitiveness and decline in traditional rural industries and land management, air pollution, hydroelectric dams and reservoirs, afforestation, livestock intensification in the Mediterranean region, intensive tourism and building construction and impact by transport.

Opportunities to be considered: Changing land use and undamaged transfrontier zones across European mountains and their function as ecological networks. A number of legislative opportunities are of actual or potential support for mountain grassland ecosystems, including the Committee of Ministers Resolution on the Ecological Charter for Mountain Regions in Europe, Alpine Convention, Convention on Climate Change, Common Agricultural Policy reform, Structural Funds and Cohesion Fund.

Focus on Pan-European objectives:

- 10.1 Develop a Code of Conduct to conserve mountain biological and landscape diversity prioritizing the use of the Pan-European ecological network approach between countries (1996-1999).
- 10.2 Establish demonstration afforestation schemes that are based on sustainable environmental objectives, and ensure that they are subject to EIA and incorporate well defined objectives. Undertake studies to assess implications of ceasing financial grants for grassland improvement in mountain areas, as well as assess differentiated management options of mountain agro-pastoral regions (1996-2000).
- 10.3 Undertake action to assess and review the option to restructure mountain farming subsidies to support rural development rather than supporting higher productivity rates (1996-1999).
- 10.4 Set up information campaign aimed at politicians and planning authorities to inform them of the issues relating to settlements in mountain regions (1996-1997).
- 10.5 Promote schemes for "no climbing, gliding, off-road or skiing areas/seasons" and legally enforce climbing bans on cliffs important for biological and landscape diversity (1996-1998).

Focus on regions:

- 10.6 Undertake a review on the potential application of mechanisms for the protection of the Balkans and Caucasus regions, and Arctic-Alpine ecosystems, using the experience of the Alpine Convention, its applying protocols and observation system (1996-1999).
- 10.7 Undertake initiatives to establish new transfrontier protected areas, and to strengthen management of existing mountain protected areas especially in CEE (1996-1997).
- 10.8 Establish guideline on how to promote low-intensity farming through management agreements under EU Agri-Environment Measures (1996-2000).
- 10.9 Undertake studies to assess and review options of the applicability of establishing ESA-type management agreements in CEE through GEF support schemes (1996-1997).
- 10.10 Establish guidelines for the conservation of the mountain ecosystem in the Tian Sian region (1996-2000).

ACTION THEME 11 ACTION FOR THREATENED SPECIES

Challenges to be addressed: To reverse declining trends in genetic diversity of wild, domesticated and cultivated species, their numbers and distribution, and promote concerted European action for species not, or not yet, sufficiently protected by habitat measures. Illegal hunting and trade.

Opportunities to be considered: Popular appeal, cultural relevance, and economic value of certain species. Species initiatives of IUCN, Council of Europe, European Union, European Environment Agency and international nature conservation NGOs, Ramsar Convention, Bern Convention, Bonn Convention, CITES, Habitats and Birds Directives, and the CORINE Programme and its PHARE extension. Regional initiatives such as species action plans under the Barcelona Convention.

Focus on Pan-European objectives:

- 11.1 Develop species action plans for all species and their genetic diversity being threatened at the Pan-European level, targeting threatened species with popular appeal (for example otter, monk seal, marine turtle, orchids), negative appeal (for example wolf, snakes, bats, arachnids and other invertebrates, poisonous mushrooms) cultural relevance (such as storks, Dalmatian pelican, brown bear, raptors, tulip and their wild ancestors) and economic relevance (for instance salmon, sturgeon, deer, mouflon, wild bulb plants, Mediterranean sea grass) (1995-2000).
- 11.2 Mobilize joint efforts, including zoological and botanic gardens expertise throughout Europe for *in situ* and *ex situ* conservation and reintroduction/restoration programmes wherever such actions are integrated into species action plans (1995-2000).
- 11.3 Establish a Pan-European list of threatened and protected species by reviewing and assessing lists in existing treaties, conventions and programmes.
- 11.4 Promote public awareness campaigns based on flagship species which highlight the issues involved in the protection of threatened species.
- 11.5 Encourage countries to develop and implement regional lists and action plans for threatened species.

CHAPTER 4 REVIEW AND ASSESSMENT OF THE STRATEGY

The successful implementation of the Strategy depends on regular review of progress and will be the occasion for dialogue between the actors involved in the Strategy. The review procedure is divided into four parts. It would be coordinated by the Council of Europe which will report progress to the *Environment for Europe* ministerial conferences, and under its auspices a Pan-European Task Force on Biological and Landscape Diversity should be established in 1996.

The Task Force will seek representation from countries party to the Council of Europe, other European countries, international organizations including the European Union, United Nations bodies such as UNDP, UNECE, UNEP, UNESCO and FAO, the World Bank, donors and international NGOs.

4.1 Monitoring of the extent to which targets are being met

The Action Plans transform the Pan-European Biological and Landscape Diversity Strategy into tangible results with targets of both a quantitative and qualitative character. Both types of targets need to be measured against pre-agreed indicators, and this periodic measurement is the substance of the monitoring process. The governmental parties adhering to the Strategy and the private or public actors responsible for its implementation should adopt a consistent approach for monitoring actual achievement. To the extent possible, use should be made of existing indicators and monitoring programmes. The actors should therefore ensure that projects contain monitoring programmes which identify: specific parameters to be monitored; methods and time scales; and output specifications.

Through the Task Force, the parties and actors would be responsible for ensuring proper communication and consultation within their respective areas of responsibility for particular actions engaged in under the Strategy.

4.2 Reporting

The review process could be institutionally localized in the Council of Europe, with regular assemblies of the governmental parties adhering to the Strategy, where other actors could assure the operational coordination in association with relevant Convention and Directive Secretariats and Committees, focusing on the Convention on Biological Diversity, Bern Convention and Habitats Directive. With regular meetings of the Council of Ministers, and existing Council of Europe Directorates, the parties adhering to the Strategy and the actors undertaking specific actions could have the opportunity to report on progress.

4.3 Updating of actions

The review process should be the occasion to examine progress or difficulties, review and amend the Strategy Action Plans, and to initiate new actions. Regular meetings of the Committees of Ministers, governmental parties adhering to the Strategy and the private or public actors would facilitate the updating of Action Plans.

Although the principle of updating allows flexibility in the means by which to pursue the objectives of the Strategy, and the specific actions, it must not be a substitute for the assessment of the Strategy, which should be a regular opportunity to review the objectives and to redefine the targets.

4.4 Assessment

Assessment of the effectiveness of the Strategy should take place both during the course of the regular periods for Action Plans and at the end of its term of reference, in the latter instance the assessment acts as a guide for future programmes to maintain and enhance Pan-European biological and landscape diversity.

The *Environment for Europe* Conferences of Environment Ministers will offer the opportunity to present the achievements of the Strategy and each of the five year Action Plans.

GLOSSARY ABBREVIATIONS

BSAP	Black Sea Action Plan
BSP	Biodiversity Support Program of USAID
CAP	Common Agriculture Policy of the European Union
CBD	Convention on Biological Diversity
CDCC	Council for Cultural Cooperation of the Council of Europe
CDPE	Steering Committee for the Protection and Management of the Environment and Natural Habitats
CEE	Central and Eastern Europe
CIPRA	Commission Internationale pour la Protection des Alpes
CIS	Commonwealth of Independent States
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CORINE	Information system on the Co-ordination of Information on the Environment
CSCE	Conference on Security and Cooperation in Europe
DECS	Directorate of Education, Culture and Sport
DELA	Directorate of the Environment and Local Authorities of the Council of Europe
DG	Directorates General of the European Commission
EAGGF	European Agriculture Guidance and Guarantee Fund
EAP	Environmental Action Plan for Central and Eastern Europe
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECNC	European Centre for Nature Conservation
ECU	European Currency Unit
EEA	European Economic Area
EEA	European Environment Agency
EEC	European Economic Community
EECONET	European Ecological Network
EFTA	European Free Trade Association
EIA	Environmental Impact Assessment

EIB	European Investment Bank
ENCY	European Nature Conservation Year 1995
EP	European Parliament
EPE	Environment Programme for Europe
ESA	Environmentally Sensitive Area
ESF	European Social Fund of the European Union
EU	European Union
EUCC	European Union for Coastal Conservation
FAO	Food and Agriculture Organization of the United Nations
FIFG	Financial Instrument for Fisheries Guidance
FSU	Former Soviet Union
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility
HELCOM	Helsinki Commission
ICPRP	International Commission for the Protection of the Rhine against Pollution
IUCN	IUCN - The World Conservation Union (The International Union for the Conservation of Nature)
LIFE	L'Instrument Financier pour l'Environnement, funding mechanism of the European Union
MAB	Man and Biosphere Programme of UNESCO
MARPOL	International Convention for the Prevention of Pollution from Ships
MedWet	Mediterranean Wetlands programme of the European Union
METAP	Mediterranean Technical Assistance Programme
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
PE-S-ST	Protection de l'Environnement - Spécialiste - Stratégie of the Council of Europe
PE-S-ZP	Protection de l'Environnement - Spécialiste - les Zones Protégées of the Council of Europe
PHARE	Trade Agreement of the European Union and Central and East Europe (Poland and Hungary: Assistance to the Restructuring of the Economy)
REC	Regional Environmental Centre

SAC Special Area of Conservation under the Habitats Directive

SDF Social Development Fund of the Council of Europe

SPA Special Protected Area under the Birds Directive

TACIS Trade Agreement of the Commonwealth of Independent States and European Union

UK United Kingdom

UNCED United Nations Conference on Environment and Development

UNCSD United Nations Commission on Sustainable Development

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

USAID United States Aid Programme

WTO World Trade Organization

WWF World Wide Fund for Nature

**PAN-EUROPEAN BIOLOGICAL AND LANDSCAPE
DIVERSITY STRATEGY**

ANNEXES

Annex 1a Existing Agreements and Initiatives on Conservation of Biological and Landscape Diversity in Europe

Title	Secretariat/focal point	Aims
CONVENTIONS AND LEGAL INSTRUMENTS		
GLOBAL		
Convention on Biological Diversity	UNEP	The conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington Convention)	CITES Secretariat	To regulate the trade in endangered species of wild fauna and flora.
Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	UNESCO	To protect cultural and natural heritage of outstanding universal value through, among other things, the listing of World Heritage Sites.
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)	Ramsar Convention Bureau	To ensure the conservation of wetlands, especially those of international importance, by fostering wise use, international cooperation and reserve creation (among other means).
Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)	Bonn Convention Secretariat	To provide a framework for the conservation of migratory species and their habitats by means of, as appropriate, strict protection and the conclusion of international agreements.
Agreement on the Conservation of African-Eurasian Migratory Waterbirds (under Bonn Convention)	Bonn Convention Secretariat	The conservation of African-Eurasian migratory waterbirds through coordinated measures to restore species to a favourable conservation status or to maintain them in such a status.

PAN-EUROPEAN

Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)	Council of Europe	To maintain populations of wild flora and fauna with particular emphasis on endangered and vulnerable species.
European Cultural Convention	Council of Europe	Cultural heritage convention for Europe.
European Convention on Architectural Heritage	Council of Europe	To provide governments with the basis to safeguard Europe's architecture and landscapes.
Draft European Landscape Charter	Council of Europe	Draft charter to ensure the effective conservation of European landscapes.

REGIONAL

Directive and Resolution of the Council of the European Community on the Conservation of Wild Birds (Wild Birds Directive)	European Commission DG XI	To protect wild birds and their habitats, such as through the designation of Special Protection Areas (SPAs).
Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive)	European Commission DG XI	To conserve fauna, flora and natural and semi-natural habitats of importance in the EU, including through the designation of the Natura 2000 network of Special Areas for Conservation (SACs).
Agri-Environment Measures (EC regulations 2078/92/EEC)	European Commission DG VI	To make regulations.
Helsinki Convention (1974, 1992)	Helsinki Convention Secretariat	To protect the Baltic marine environment against all forms of pollution.

Alpine Convention (1991)	Commission Internationale pour la Protection des Alpes (CIPRA)	To conserve and manage the Alpine region in a sustainable way.
Baltic Sea Joint Comprehensive Environmental Action Programme (under Helsinki Convention)	Helsinki Commission (HELCOM)	To improve the quality of the Baltic Environment, such as by the designation of marine and coastal protected areas.
Bucharest Convention on the Protection of the Black Sea against Pollution, 1992	UNEP/UNDP	To protect the Black Sea against pollution.
Convention for the Protection of the Marine Environment of the North-East Atlantic	Oslo-Paris Commission	To prevent pollution of the North-East Atlantic.
Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention)	UNEP	To protect the Mediterranean Sea against pollution.
Mediterranean Action Plan (under Barcelona Convention)	UNEP	To improve the quality of the Mediterranean environment implementing the Barcelona Convention, 1976, including through a protocol on Specially Protected Areas.
MedSPA (under Barcelona convention)	UNEP	To provide special protection for endangered Mediterranean species and habitats vital for their conservation.

INITIATIVES AND PROGRAMMES

GLOBAL

World Conservation Strategy and the subsequent Strategy for Sustainable Living (Caring for the Earth)	IUCN/UNEP/WWF	To provide a strategic conservation framework and practical guidance to all nations to (1) maintain essential ecological processes and life support systems; (2) preserve genetic diversity; and (3) ensure the sustainable utilization of species and ecosystems.
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Agenda 21	UNCED	Outline priorities and guidelines towards sustainable development to be implemented at the national level.
Man and Biosphere Programme	UNESCO	To develop within the natural and social sciences a basis for the rational use and conservation of the resources of the biosphere, through such measures as the creation of a worldwide network of Biosphere Reserves.
PAN-EUROPEAN		
European Conservation Strategy	Council of Europe	To provide governments with the basis for developing policies to safeguard and manage natural resources.
European Ecological Network (EECONET)		To develop a Europe-wide ecological network for the conservation of nature.
Environment Programme for Europe	UNECE, EU, UNEP, IUCN	To prepare the intergovernmental environmental programme for Europe, following Dobriš and Lucerne.
European Nature Conservation Year (ENCY) 1995	Council of Europe	To develop a public awareness campaign in 1995 on "conservation outside protected areas".
European Network of Biogenetic Reserves	Council of Europe	To conserve representative examples of Europe's habitats, biocenoses and ecosystems through a network of biogenetic reserves.
<i>IUCN Parks for Life: Action for Protected Areas in Europe</i>	IUCN	To ensure an adequate, effective and well managed network of protected areas in Europe.

REGIONAL

Fifth Environmental Action Programme (1992)	European Commission DG XI	The EU's programme of policy and action on environment and sustainable development.
CORINE Information System	European Environment Agency	EU system to develop a database on European environment, including for nature conservation.
Environmental Action Programme for Central and Eastern Europe (1993-1995)	Task Force established by Ministers with EU, OECD, World Bank, and EBRD	Endorsed by the Ministerial Conference Lucerne 1993 to promote environmental protection measures in central and eastern Europe.
<i>Ecological Bricks for our Common House of Europe Initiative</i>	c/o European Ecological Movement, Global Challenges Network	To promote the establishment of 18 transboundary protected areas.
Green Lungs of Europe (1993)	Institute of Sustainable Development	Based on Poland's experience, to create sustainable development zones in Belarus, Estonia, Latvia, Lithuania, Poland, Russia and Ukraine.
Environment Programme for the Danube River Basin	Task Force for the Programme	To conserve the Danube River Basin.
Black Sea Action Plan	UNEP, UNDP, World Bank	Environmental protection programme for the Black Sea region.
Ministerial Conference on the North Sea	Danish Ministry of the Environment	To protect the North Sea ecosystem.
MEDPAN	European Investment Bank/World Bank	To strengthen links between managers of protected areas.
MedWet	European Commission DG XI	To conserve Mediterranean wetlands.
Mediterranean Technical Assistance Programme (METAP)	World Bank/European Investment Bank	2nd Phase of European Programme for the Mediterranean, to reverse present environmental degradation.
Nicosia Charter (1990)	European Commission	To provide closer cooperation on sustainable development in the Euro-Mediterranean region, including nature conservation.
Arctic Initiative	Working group on the Conservation of	To prepare a common Arctic Environmental Protection Strategy.

Nordic Arctic Conference	Arctic Flora and Fauna c/o Nordic Council of Ministers	Environmental protection of the Arctic region.
Danube River Basin Global Environment Facility (GEF) Programme (1991)	World Bank	Environmental protection for the Danube River.
Danube Delta Biodiversity GEF Project	World Bank	To protect the Danube Delta ecosystems.
Agreement on the Protection of the Rhine against Chemical Pollution	International Commission for the Protection of the Rhine (ICPRP)	To protect the Rhine from chemical pollution.
Ministerial Declaration on the Sixth Trilateral Governmental Conference on the Protection of the Wadden Sea	The Common Wadden Sea Secretariat	To coordinate the conservation of the Wadden Sea.

Annex 1b Achievements, shortcomings and Strategic potential of existing policies and legislation

<i>Initiative</i>	<i>Achievement</i>	<i>Shortcomings</i>	<i>Opportunity for the Pan-European Biological and Landscape Diversity Strategy</i>
Convention on Biological Diversity	International framework for national action, agreed to by all countries in Europe.	Does not fully link biodiversity to cultural landscape diversity. Deals at the national level and currently lacks response at a coherent Pan-European level.	The fundamental framework for national and pan-European action and strategies.
Agenda 21	Develops guidelines in multi-sectorial approach, combining needs under economics, society and ecology.	Deals at the national level and currently lacks response at a coherent Pan-European level. Does not sufficiently highlight landscape needs.	Acts as a framework model to incorporate guidelines on integrating sectors.
World Conservation Strategy and Caring for the Earth	Major global initiative which encouraged the global view of conservation as wise use.	Does not fully incorporate landscape needs.	A fundamental framework of value for the Strategy.
World Heritage Convention	Identifies sites of global significance for natural heritage and cultural landscape.	Only deals with individual sites, and then at the global level rather than European.	Not strategic for Europe, however nature, culture and cultural landscape selection criteria of value for the Strategy. Incorporate sites into the coherent Pan-European Ecological Network.
Ramsar Convention	Well established and large number of parties, relatively simple to implement. Devised wise use of wetlands concept.	Mainly individual country/site related and does not cover all countries of Europe.	Apply Ramsar wise use policy in the Strategy's wetland actions. Integrate Ramsar sites into the Pan-European Ecological Network.
Bern Convention	Key initiative focusing on wider European biodiversity conservation.	Concentrates only on habitats and species. Not all European countries are parties. Lack of funding mechanism.	Potential mechanism for CBD implementation in pan-Europe and hence to help provide legal framework to support the Strategy. Potential of landscape annexes being incorporated in the Annexes as confirmed in the Monaco recommendations.
Bonn	Integrated flyway/migratory pathways approach involving all Range States.	Administrative process towards technical	Integrate elements of Bonn Convention into the Strategic

Convention	Regional agreements possible.	agreements are time consuming.	framework and the Pan-European Ecological Network.
European Cultural Convention	Important framework convention for cultural heritage and identity.	Lacks cultural landscape details.	Support to framework of the cultural elements of the Strategy.
European Convention on Architectural Heritage	Important for architecture conservation in the landscape.	Lacks cultural landscape details.	Support to the architectural and cultural landscape components of the Strategy.
European Convention on Archaeological Heritage	Important for archaeology conservation in the landscape.	Lacks cultural landscape details.	Support to the architectural and cultural landscape components of the Strategy.
Environment Programme for Europe	Broad framework from which concerted actions in a European context are supported by sovereign states. Promotes the Dobříš report and elements towards the Pan-European Biological and Landscape Diversity Strategy.	Not full incorporation of nature and landscape elements into all environmental actions.	Promotes the Strategy in the process leading up to the Sofia Conference in 1995.
EU Habitats and Birds Directives (Natura 2000)	The Birds and Habitats Directive provide the framework towards conservation of threatened species and habitats within priority areas linked to the wider countryside. Forms the basis for a coherent European Ecological Network in the EU.	In process of implementation, and effectiveness will not be known till post 2004. Does not focus thoroughly on wider species/habitat or landscape conservation. Birds Directive weaker in coverage and procedures.	Integrate into the framework of the Strategy and ensure that the SACs are a fundamental part of the Pan-European Ecological Network. Review coverage of essential ecosystems, including semi-natural ecosystems.
EU Environmental Impact Assessment Directive	Requires Member States to identify, describe and assess effects of economic, social and environmental projects on ecosystems, habitats, landscapes and cultural heritage.	Implemented at each Member State level only. Merely ensures that the authority is informed of environmental impact. Inadequate application by Member States.	Potential to broaden the scope of the EIA principles to encompass the wider Europe. Integrate into the Strategic framework.
EU Agri-Environment	Assists and encourages the maintenance of extensive agriculture or set aside, provides	Not widely applied for the benefit of biological or landscape diversity in all	Important principles, opportunities and demonstrations to be used in Strategy actions.

Measures	the framework to establish Environmental Sensitive Areas as integrated areas for environmental and socio-economic use.	countries of the EU.	
EU Fifth Environmental Action Programme	Framework programme of the EU to coordinate European Commission multi-sectorial policies in relationship to the environment.	Identifies the need for integrating the environment into all the sectors, but does not yet identify clear priority actions.	Consider the integration of the Strategy into the review process of the Fifth Environmental Action Programme.
Environmental Action Programme for Central and Eastern Europe	CEE countries in collaboration with the Council of Europe and IUCN, have developed biodiversity conservation priorities as examples of integrated approach serving both conservation and development objectives.	Limited number of site-based projects; limited attention to nature and landscape elements.	Incorporate the case study biodiversity conservation priority sites as demonstrations in the Strategy actions.
Draft Recommendation to Member States on the Integrated Conservation of Cultural Landscape Areas as part of Landscape Policies	When signed and implemented will ensure integrated conservation of cultural landscape areas as part of landscape policies for all Council of Europe countries.	Not yet signed or implemented.	With the link to the Strategy would provide an important framework for integrating cultural landscape areas into landscape policies.
Helsinki Summit Declaration	Encourages the development of a network of protection areas in the CSCE region to conserve and safeguard large-scale biotopes and ecosystems, and conservation of species.		Integrate the environmental principles of the Declaration into the Strategy.
European Conservation Strategy of the Council of	Integrates landscapes and economic sectors into biodiversity conservation.	Not fully acknowledged throughout Europe.	Basic conceptual framework for the development of the Strategy.

Europe			
MAB Biosphere Reserve Programme	Establishes integrated areas for environment, research and socio-economic use, basing areas on networks in key biogeographical regions of the world. Focus in Europe is through EuroMAB.	No legal framework. Limited funding support.	Important tool to support the Strategy's aims for integration of sectors into areas established for cultural and natural heritage.
IUCN <i>Parks for Life: Action for Protected Areas in Europe</i>	The first European Strategy towards concerted European protected areas action, large ownership/support.	Concentrates on protected areas issues.	Important in linking protected areas issues to other sectors within the Strategy.
EECONET Declaration Maastricht 1993	The first initiative to call on the need for a European Biological and Landscape Diversity Strategy, emphasis on pan-European ecological coherence.	Still to be developed at the Pan-European level.	Apply the principles as the guiding mechanism for pan-European Ecological network.
European Biogenetic Reserves	Practical Pan-European network of biogenetic reserves of conservation value.	Lack of legislative framework.	Integrate into the coherent Pan-European Ecological Network process.

Annex 1c Economic and fiscal initiatives and opportunities for the Pan-European Biological and Landscape Diversity Strategy

<i>Mechanisms</i>	<i>Achievements</i>	<i>Shortcomings</i>	<i>Potential for the Pan-European Biological and Landscape Diversity Strategy</i>
Global Environmental Facility	Biodiversity integrated into priority funding areas of GEF in developing countries including CEE and CIS.	Does not focus on all countries of Europe.	As one of the key funding mechanisms for Agenda 21 and the Convention on Biological Diversity, GEF can give substantial support to the Strategy.
Council of Europe Social Development Fund	The Fund operates for the benefit of human beings, striving to improve their condition. It focuses on dealing with exceptional circumstances, including natural or ecological disasters.		Potential for giving support to the Strategy.
EU Structure and Cohesion Funds	Focuses on EU fiscal resources, concentrating on places of greatest need integrating the natural environment into overall objectives. Community initiatives fund land use planning, protection of flora and fauna, and strengthening know-how.	Insufficient application of Cohesion and Structure funding to landscape and biological diversity issues. Continued emphasis for projects which may not be of strategic importance. Mainstream finance to economic projects which have caused significant environmental tension in the past.	Ensure biodiversity and landscape diversity considerations are assured in the six priority objectives for Community Structural Policies, and incorporate them into the Pan-European Ecological Network. Focus Cohesion Funds closer towards the conservation of biological and landscape diversity. Improve environmental impact review in procedures.
EU Financial Instrument for Fisheries Guidance	Inherent fisheries restrictions to promote sustainability of fisheries stocks and their areas.	Insufficient taking into account the wider environmental concerns, including the impact on vulnerable or endangered marine habitats.	Maximize the FIFG biological diversity elements in the Strategy.
EU European Agricultural Guidance and Guarantee Fund	Establishment of, and support to, Environmentally Sensitive Areas, and other agri-environmental measures and price support in the wider EU landscape, which may assist marginal extensive agriculture to be maintained.	The original Common Agricultural Policy objectives were to ensure that food supplies were available to consumers and to increase agricultural productivity. The protection of the environment was not specified as an objective.	Integrate the advantageous elements of the Agri-Environment Measures and Environmentally Sensitive Areas into promoting biological and landscape diversity conservation and incorporate areas into the Pan-European Ecological Network.
EU TACIS and PHARE	Funds integrated environmental programmes in the CEE, including integrated river delta and	Very insufficient application of TACIS and PHARE funds to biological and landscape	Lacking coherent goals for sustainable development and environmental conservation, explore options to

	mountain projects and an extension of the CORINE land cover and biotopes beyond the EU.	diversity issues. Inadequate environmental safeguards in economic or social programme.	integrate biological and landscape diversity conservation needs into TACIS and PHARE activities.
EU LIFE	Major emphasis on nature protection and biodiversity, linked to objectives requirements under Habitats and Birds Directives.	Continued insufficient funding for landscape and biological diversity issues.	Need to raise funding for nature in the LIFE instrument considerably.
EU Fourth Framework Programme	Focuses on priority research within the EU and neighbouring countries of Europe.	Lack of coherent view on biological and landscape diversity conservation in relationship to land use.	Need to focus key research towards the Strategy. Develop vision on land use and introduce or recast coherent set of instruments.
EU European Social Fund and Human Resources Community Initiatives	Incorporate the recognition into social and human resource policy of the importance of nature, including training programmes directly supporting protected areas managers.	Insufficient direct policy support to employment, education or training connected to the natural environment. Disproportionate support for other sectors towards employment and training in natural and rural areas.	Need for significant raising of the importance of integrating social and human resource issues into European biological and landscape diversity conservation.
Bi- and multilateral donor funding	Focuses on general environmental and biodiversity issues, prioritizing the CEE and CIS.	Inadequate funding and coordination of bi- and multilateral donor funds towards biological and landscape diversity issues in Europe.	Ensure integration of bi- and multilateral donor funding into the Strategy. Increase awareness about the need to raise bilateral funding aid for biological and landscape diversity conservation.

Annex 2 Justification of focus of the Action Plan on landscapes, ecosystems and species

Currently, there is an overall negative trend for many landscapes, ecosystems and species, which has effects on the quality of human life. To redress the balance and find the appropriate response on the international level, it is important to focus the Strategy on ecosystems and landscapes of nature conservation value for the whole of Europe and its regions. Such nature conservation value is determined according to the following criteria:

Biological Diversity: Actions should be prioritized in areas of greatest biological diversity, which are determined according to:

- Naturalness: minimally man-altered areas, where the ecosystem and species composition is closest to the original natural habitat;
- Diversity: areas with a wide range of habitats, species and/or genotypes; including those maintaining the genetic diversity of traditional varieties and races;
- Representativeness: areas with habitats that are typical of a region;
- Threat or rarity: areas with types of habitats, species and/or genomes that are suffering environmental stress;
- Size: areas that are large enough to be sustainable for biological and landscape diversity in Europe;
- Endemism: populations restricted to local areas or to Europe;
- Cultural biodiversity: including habitats/species of cultural, aesthetic or regional identity.

Criteria concerning *nature conservation value* can be interpreted to demonstrate that the focus of the Strategy concentrates in priority on:

- *Ecosystems of greatest biological diversity:* forests, mountains, European rivers, grasslands, inland wetlands, coastal and marine systems;
- *Land/seascapes of most significant European-wide concern:* tundra, taiga, uplands, bocages, open fields, steppic/arid landscapes, regional landscapes and artificial landscapes;
- *Species under threat of extinction.*

Landscape Diversity: Actions should maintain and enhance natural and cultural landscapes of European significance, determined by:

- the main geological land forms that characterize the geological/climatic zones based on four criteria: rarity, uniqueness, representativity and naturalness. Geological features may include untouched river systems, pingos, eskers, dune systems, coastal barriers, dolines, domes and fossil biota;
- the combined application of ecologically sound processes and sustainable use of natural resources;
- the non-intensive management of semi-natural habitats for fauna and flora;
- regionally and culturally distinct land use and settlement patterns, including field systems, terraces, historic houses and estates. Cultural features can include rural vernacular architecture, historic parkland estates, ancient drove routes, canals and ditches, moats, fishponds, man-made waterways, traditional settlement and field system patterns;
- outstanding scenic quality representing the visual characteristics of the natural and cultural landscapes of the continent.

The Pan-European Biological and Landscape Diversity Strategy is a European response to support implementation of the Convention on Biological Diversity. The Strategy introduces a coordinating and unifying framework for strengthening and building on existing initiatives. It does not aim to introduce new legislation or programmes, but to fill gaps where initiatives are not implemented to their full potential or fail to achieve desired objectives.