Technical Assistance for Identifying Actions for the Protection and Sustainable Development of Natural Resources and Biodiversity in the Strandja / Istranca Mountains

Interim Report

Digital Version

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Table of Content

1 INTRODUCTION

1.1 BACKGROUND

This Interim Report compiles the results of investigations carried out by an international team of experts (the Technical Assistance (TA) Team) in Turkey and Bulgaria between January and February 2005.

The TA Team's task was: (a) to provide technical assistance, helping Turkey and Bulgaria jointly identify and define a set of mature, coordinated and integrated actions in the field of environmental and sustainable development; and (b) to plan a joint Turkish-Bulgarian development project within the scope of the 2004 - 2006 PHARE/Cross Border Cooperation Programme (CBC) of the European Union. The TA team is also responsible for the preparation of the documents necessary for presentation of the related projects to the EC for approval.

The Bulgarian beneficiaries of this work and the planned CBC projects are the Ministry of Rural Development and Public Works and the Ministry of Environment in Sofia. The Turkish beneficiaries are the State Planning Organisation (SPO), which is also responsible for coordinating all project activities, and the Ministry of Environment and Forestry, both in Ankara.

1.2 THE CBC PROGRAMME AND ITS IMPLEMENTATION

Cross-Border Cooperation (CBC) aims at strengthening relations between the border regions of Bulgaria and Turkey by promoting joint activities for achieving economic and social development, and for overcoming problems deriving from the specific conditions of these regions – all in a manner compatible with the protection of the environment.

The general objective of the programme is to contribute to the elimination of any negative effects resulting from living near the border, and to create preconditions for an improved quality of life through joint cooperation between the populations on the two sides of the border.

Presently, Bulgaria already has ongoing PHARE CBC programmes with Romania and Greece. As of 1 January 2004, the geographical scope of the CBC Programme has been extended to the Bulgarian border with Turkey. This is therefore the first cross-border cooperation scheme in which Turkey participates. In both countries, the CBC Programme will serve to pave the way for implementing INTERREG programmes in the future

The objectives of the Phare Cross-Border Cooperation (CBC) Programme Turkey / Bulgaria are:

> **(a)** to promote cooperation between border regions in Turkey and Bulgaria, and thus to help the border regions concerned to overcome any specific development problems which may arise from their position within the national economies, for the benefit of the local population and in a manner compatible with the protection of the environment; **(b)** to promote the creation and the development of cooperation networks on both sides of the border, and to promote the establishment of links between these networks and with wider community networks.

During the Joint Cooperation Committee Meeting of March 31st 2004, Turkey and Bulgaria jointly identified three main priorities for the 2004-2006 CBC Programme:

Priority 1: Cross-border infrastructures
Priority 2: Protection, improvement and management of the environment
Priority 3: People-to-people actions

Priority 2 (environment) is divided into three different measures:

- Measure 2.1: Integrated management and protection of waters;
- Measure 2.2: Protection and sustainable management of natural resources and biodiversity;
- Measure 2.3: Cooperation in the event of natural calamities.

The mission of the TA Team, documented in the current report, concerns Measure 2.2 only.
On the Turkish side, 1,330 Million Euro (M€) for 2005 and 5,33 M€ for 2006 have been allocated; on the Bulgarian side, 3,9 M€ have been budgeted for 2005 only. The funds are foreseen for an "umbrella project" whose components include various activities designed to strengthen regional cooperation in the conservation, sustainable development and use of the unique natural resources of the Strandja / Istranca Mountains, while protecting the ecosystems and biodiversity of the region.
Nevertheless all activity plans under Priority 2 have to consider that main sewerage and wastewater treatment plants – as well as major investments in waste collection, treatment and disposal – are not included under this CBC budget (although they are consistent with the objectives of the current programme).

To achieve the maximum level of coordination and harmonisation in the preparation of "the umbrella project", short-term technical assistance has been requested by the relevant Bulgarian and Turkish institutions.

1.3 OBJECTIVES AND WORK STRATEGY OF THE TA TEAM

The TA Team is composed of specialists from Turkey, Bulgaria, Germany and Denmark with professional expertise in land use planning and forestry, biodiversity and nature conservation, culture and ecotourism, and urban development and regional planning.

The scope of the work of the TA Team is; (a) to analyse the project area and identify a set of project activities, documenting these in the current report (Stage 1); and (b) to draft the project fiches (Stage 2). Due to the given time restrictions the TA Team completed the drafts of the project fiches (see Annex 5.1, 5.2, 5.3) before this Interim Report, and both, fiches and report, until the end of Stage 1.

The work strategy is based on the principles of a sectoral land use planning approach. The components are:

- urban and rural development and infrastructure
- agriculture and commercial fisheries
- multi-purpose forestry
- wildlife management
- biodiversity, nature conservation and landscape aesthetics
- tourism and recreational activities

The division into the above sectors facilitates the analysis of the current situation in the project area. The outcomes of this approach were used to find a synergy between the different land use

forms and to formulate an integrated project strategy – one which considers multifunctional and sustainable land use in the region.

The analysis of the mentioned sectors had previously been done on the Turkish and the Bulgarian part of the project area, focusing on similarities and existing transboundary activities. A major task was the investigation of possibilities for *new* regional cross-border cooperation initiatives and/or for strengthening existing transboundary activities relevant to the sustainable management of natural resources in the region.

The activities of the TA Team (all documented in the Joint Mission Report in the Annex 5.9) fell into three categories:

- Visiting and studying the project area

Thanks to the unexpectedly good weather at the beginning of January, the team was able to visit the most important places in the project area during a two-week travel period. With the help of the Bulgarian and Turkish experts, and thanks to the friendly support of the locals, each on-site visit became a valuable source of first-hand information. Personal talks with villagers revealed problems and possibilities for the envisaged projects. A second planned visit to the border region was cancelled due to the extraordinary heavy snowfall in early February.

- Discussions with local stakeholders

While visiting the project region, a wide range of official stakeholders were contacted. These included representatives of regional governments, municipalities, forestry authorities, local NGOs and people involved in existing projects. The purpose was to learn from their experience and knowledge, and to become aware of any existing problems, needs and requirements. For this reason, the activities of the team started with a “Round Table Meeting” of official stakeholders in Kirklareli, hosted by the Regional Governor. The various land use sectors were discussed and documented in a structured way using a Metaplan Technique (see the results in the Annex 5.6).

- Meetings with decision makers

Frequent communication, including information sharing and work sessions with the decision makers in Sofia and Ankara was an essential part of the assignment, ensuring a productive exchange of experiences and information gathered during the project preparation. The beneficiaries of the project and the representatives of the CBC programme, the EC Delegation and the CFCU were met in Ankara and Sofia to discuss the drafting of the project fiches and the budget. In addition periodic reports on the activities of the team were submitted to the project counterparts (see Joint Mission Report in the Annex 5.9).

All investigations of the TA Team were carried out between January and February 2005 in order to select activities that are integrated with a sustainable cross-border impact and have as much “mirror” effect as possible, thus meeting the CBC requirement of ensuring maximum cooperation between the two countries.

Based on the discussions held with all Turkish and Bulgarian stakeholders on local, regional and central level, it can be said that any support by the CBC programme to develop the region would be most welcome and is needed. Moreover, during these discussions it became clear that the creation of a transboundary Biosphere Reserve meeting the international standards of the UNESCO Man and Biosphere Programme is a commonly accepted strategy to improve cross-

border cooperation relevant to sustainable development and environmental protection on a long term basis.

The findings of the TA team are documented in 3 fiches (one for Bulgaria for 2005, and two for Turkey for 2005 and 2006, see Annex 5.1, 5.2, 5.3). These are interlinked in a bi-national and multi-year context.

The overall objective of the fiches is to achieve the establishment of a *Transboundary Biosphere Reserve* (TBR) incorporating a consistent network of Natura 2000 sites. To successfully establish such a TBR, a comparable environmental situation in both countries must be created. Hence, the planning of two national Biosphere Reserves (BR) is the most important cornerstone for the 2005 planning period.

2 THE PROJECT AREA

2.1 GEOGRAPHIC LOCATION AND CLIMATE

2.1.1 Location and Topography

The area considered for the CBC/Measure 2.2 is the mountainous border region between Turkey and Bulgaria, stretching from the Tundja River in the west to the Black Sea coast in the east, located approximately between 41.50' to 42.50' northern latitude and 27.00' to 28.00' eastern longitude.

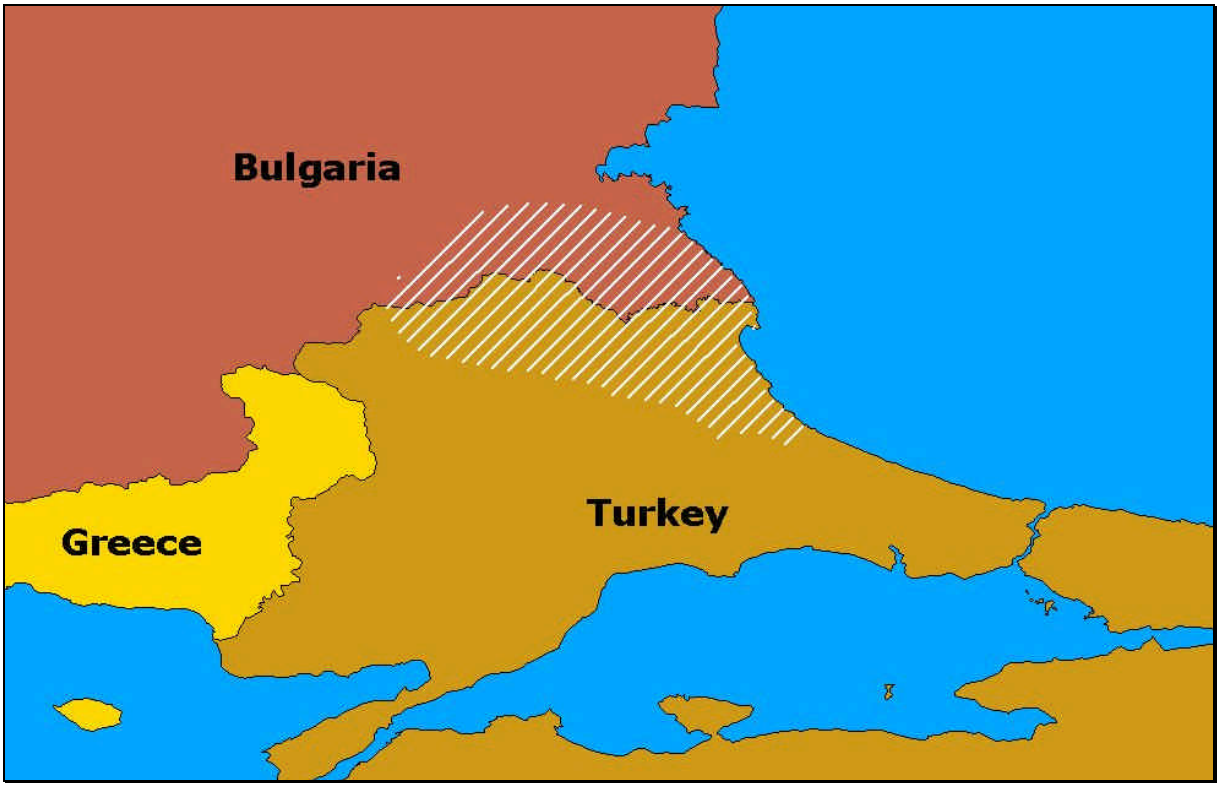

Figure 1: Overview over the project region

However, the project area to be studied by the TA Team is not clearly defined by geographical or administrative boundaries. Rather, it comprises the historically developed region called Strandja in Bulgaria and Istranca (or the Yildiz Mountains) in Turkey. As the following map shows, there is no exact boundary to delineate the Strandja / Istranca Mountains, but in relation to administrative responsibilities, the entire area belongs to the province of Kirklareli in Turkey and the province of Bourgas in Bulgaria. Moreover it is important to know, that the Strandja Nature Park totally falls within the project area.

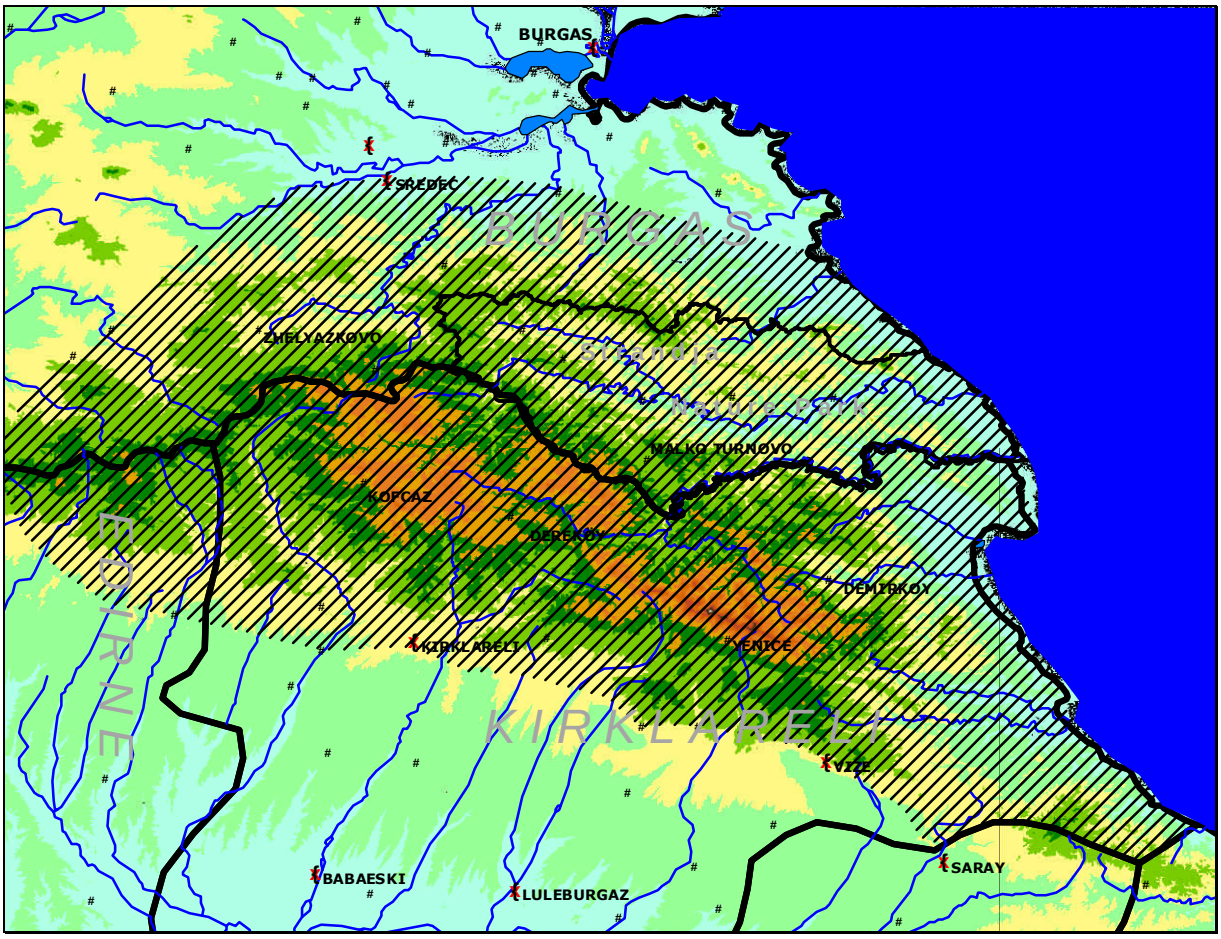

Figure 2: Topography and province borders of the project region (hashed) in the Strandja / Istranca Mountains.

Strandja / Istranca comprises several distinct low mountain ranges and river valleys perpendicular to the southern Black Sea coast, spreading evenly on both sides of the Turkish-Bulgarian border. The highest elevation in Bulgaria is Gradiste (710 m) and in Turkey is Mahiada (1,031 m). The terrain is gently undulating and thus does not appear to be exceptionally mountainous as the hills are mainly covered by forest. Rivers and creeks cut deeply into the terrain, with river gorges and "sunken valleys" close to the Black Sea. These valleys formed during the last Ice Age (Würm), during which world sea levels declined significantly. Another characteristic of the Strandja / Istranca area are karst landscapes where the limestone contains caverns and caves, as well as whirlpools and underground waterways.

Figure 3: Landsat Image from Strandja/Istranca Mountains

2.1.2 Climatic Conditions

The climate of Strandja / Istranca is a function of continental influences from the west and north, combined with the mitigating effects of the Black Sea and the Marmara / Mediterranean Seas. Classified as a "transitional Mediterranean" region, the maximum precipitation is during the months of November and December, with a minimum during August.

However, the ranges differ from other transitional Mediterranean areas by having a relatively high rainfall and frequent fog. Also, the influence of cold winds from the north and north-west is significant during winter due to the absence of any natural barriers. Accordingly Strandja / Istranca experiences short periods of fierce cold.

Snowfall during winter may be significant, with inland snow cover for 20 to 50 days. However, coastal snow cover is below 20 days per year. The average depth of the snow cover is 30 cm; the maximum is 120 cm.

In recent years the rain/snowfall during winter has decreased significantly due to a change in directions of Mediterranean cyclones.

The region is characterised by the predominance of northern winds. On the coast, northern winds blow from November to March, Eastern winds from April to August, and north-eastern winds during September and October. The inland hilly areas have a greater diversity in monthly wind directions. Here northern winds predominate from January to March and during October.

2.2 CULTURAL HERITAGE

The Strandja / Istranca region contains numerous archaeological and historical sites, some dating back to the chalcolitic and bronze ages.

In Thracia there are sites (tumuli) and traditions dating back to the Kingdom of Odris (1st Century BC to 1st century AD) when Byzia (presently Vize) became the Thracian capital.

The area was once a centre for sheep and cattle rearing, carpet weaving, and the production of fur coats and jewellery. Also the area was known for wood carving and stone sculpturing, as well as for the painting of icons.

Notably in Bulgaria, a number of ancient traditions still exist: fire dancing (dancing on live coals) in the village of Bulgari on June 3rd, a Christian ritual linked to the earlier cult of Dionysus, and a special carnival festival “the unmasked Mummers”. Also the special Strandja dialect of Bulgarian is still alive and spoken in the area.

Archaeological sites contain dolmens, tumuli and ancient tombs, while historical monuments include castles, ancient roads, traditional houses, chapels, mosques and churches. Notable ancient houses are preserved in Malko Turnovo and in the village of Brushlian. Three of these houses function as museums.

The ancient town of Achtopol on the Bulgarian coast is surrounded by the last remains of a fortress wall, while Petrova Niva is a site of major importance in Bulgarian history (the 1903 uprising). Also, the Turkish fishing village of Kiyiköy contains numerous houses of historical value. Unfortunately most of these are in poor condition and no restoration is taking place at present.

The historical remnants on the Turkish side of the project area date from the Roman, Byzantine and Ottoman periods. Notable ruins from the Roman and Byzantine periods are found at the city of Vize. The Roman theatre located in Vize is the only one in Thracia. Buildings dating to the Ottoman period are mainly found in the towns of Kirklareli, Lüleburgaz and Babaeski, outside the project area.

2.3 SOCIO-ECONOMICAL SITUATION AND LAND OWNERSHIP

The whole inland Strandja / Istranca region is slowly being depopulated as young people move to larger cities and the coast. Meanwhile, the Bulgarian coast is experiencing growth due to the tourism industry. Thus the population structure of the forest communities has become skewed. Mainly elderly people are staying behind, agricultural lands are becoming idle, and some villages are becoming depopulated. Notably in Bulgaria, numerous village houses are being transformed into summer residences owned by outsiders.

Within the borders of the Bulgarian Strandja Nature Park, 89% of the population is ethnic Bulgarian while 11% is Roma. 95% of the population belongs to the Orthodox Church while 5% is

Roman Catholic, living mainly in Malko Turnovo (Source: Strandja Nature Park Management Plan). In Turkish Istranca the vast majority of the population is Muslim Turk.

Private land was returned to its original owners in Bulgarian Strandja after the changes in 1989, but this resulted in a division of land into small parcels, limiting its agricultural marketability.

In Turkish Istranca, a cadastral enquiry is presently underway to determine the exact ownership of land. It is feared that the resolution of land ownership will lead to the sale of land and houses for summer residence by outsiders from Istanbul and Edirne.

Presently almost all forests and the coastal shorelines and beaches are state owned in Istranca. Rural agricultural land and pastures are predominantly privately owned, while urban land is both privately owned and under the ownership of central and local institutions.

The following figures for the Strandja Nature Park (Source: Nature Park Management Plan) reflect the land ownership situation in the Bulgarian project area. The figures are not consistent, which can be seen as indicative of the existing cadastral problems of land ownership, since the land privatisation process was started only in the 1980's.

According to the Management Plan, some 70% of the land within the park is state property, 11% is privately owned and 11% is municipal property, The ownership of the remaining 8% is not clearly defined.

54% of agricultural land is privately owned, 8% is owned by the municipalities, while another 2.5% is state property. The ownership of the remaining 35% is again not clearly defined. But it is remarkable that according to municipal statistics a mere 5% of the arable land is under agricultural management.

About 86% of the forests are state property, 11% are municipal property, while only 1.2% are privately owned and 2% are temporarily managed by the municipalities (the ownership of the latter is not explicitly defined in the Management Plan).

2.4 INSTITUTIONAL ASPECTS

Bulgaria

The Ministry of Environment and Water (MOEW) is responsible for state policy with respect to environmental protection. The responsibilities of the MOEW include “preservation of the biodiversity and protection of the natural environment” and “the preservation and the sustainable use of the natural resources”. The specialised structure for management of protected areas and conservation of biodiversity is the National Nature Protection Service (NNPS) under the MOEW.

The Regional Inspectorate of Environment and Water (RIEW) of Bourgas is the regional institution of the MOEW and operates over the whole territory of the Bourgas District. The RIEW includes a department for the control of protected areas and biodiversity.. This department functions as an inspectorate for the protected areas and is responsible for the preservation of biological diversity and the use of the natural resources in the territory of the RIEW.

The Ministry of Agriculture and Forestry implements the government policy in agriculture, forestry, hunting and fish husbandry.

The National Forestry Board (under the Ministry of Agriculture and Forestry) and respectively the Regional Forestry Board - Bourgas and Local Forestry Districts implement the state policy and control the maintenance, the use and the preservation of the forests and the wildlife and fresh water fish population.

Strandja Nature Park Directorate (under the National Forestry Board) is authorised: to implement the Management Plan of the Park; to control forest management activities, non-timber use of the forests and construction activities; and to monitor the Park with respect to the preservation of the biological diversity.

Local authorities are represented by the Municipal Councils, the Mayors of Municipalities and the municipal administrations, as well as by the Mayors of the villages. Some of the competencies of local authorities are:

- Determining policy for the development of the Municipalities;
- Resolving local problems relating to the economy, territorial and settlements planning, preservation of the environment, social issues, educational and other issues;
- Approval of general and detailed municipal plans, and control of construction projects;
- Management of municipal property, including municipal agricultural areas;
- Construction, maintenance and use of fourth class and local roads;
- Construction, maintenance and use of installations for recycling and disposal of waste waters from households; organising and controlling the collection, disposal and recycling of household solid wastes;
- Maintenance and control of municipal forests;
- Preservation of cultural-historical heritage;

Additional competencies relevant to these areas are vested in the Ministry of Regional Development and Public Works, the Ministry of Culture, and in a number of national and regional agencies, concessionaires, users and NGOs.

Turkey

In Turkey, the Central Government, its local representatives and the Local Authorities have authority and responsibilities related to the project area.

The Ministry of Environment and Forestry (MoEF) is a central governmental agency having the authority over any kind of ownership and management related to the environment and forests. There are basic obligations related to these issues within the Ministry, such as policy development, investments, monitoring / directing, taking measures, and determining protected areas. The Ministry has been divided into several General Directorates to fulfil these duties and responsibilities.

The General Directorate for Nature Protection and National Parks (MoEF-GDNPNP) is a central governmental agency specialised in natural and biodiversity protection, and is authorised to act on these issues. It is an entity determining status, carrying out investigations and directing and monitoring activities.

The Ministry of Agriculture and Rural Affairs (MoARA) is a central agency responsible for all issues related to agriculture, stock-breeding, fisheries, agriculture and farming – are of which are

relevant to the CBC Project. Its authority and responsibilities within these areas are similar to those of the Ministry of Environment and Forestry.

The Ministry of Tourism and Culture (MoTC) is another central governmental agency responsible for the culture and tourism policies of the country, implementing those policies and monitoring.

In addition to the above, several other Ministries are responsible for areas relevant to the CBC Programme implementation. The important ones are: the Ministry of Resettlement and Public Works, the Ministry of Transportation, and the Ministry of Foreign Affairs.

The State Planning Organisation (SPO) is an under-secretariat of the Prime Ministry. The organisation is responsible for producing and monitoring five-year development plans and the annual investment programmes. The production of the Regional Development Plans and Structural Adjustments are also the duties of SPO. Such plans are obligatory for the public sector, and advisory for the private sector.

The Kirklareli Governorship is the highest level administrative entity in the province. It represents the state within the boundaries of the province and is responsible for carrying out local tasks of all Ministries. The Central Governmental Agency is organised into Directorates. The Governorship is responsible for the management of all Directorates within the boundaries of the province. In addition, some of the Ministries have established provincial organisations with special duties.

The municipalities are local administrations. The Municipal Assembly, Mayor and Board of Directors are the main executive bodies. Municipalities have very different duties and service responsibilities. These include: the organisation of urban life, construction and planning activities; the establishment and operation of water and sewerage systems; infrastructure activities such as solid waste management and transportation services; and the organisation, establishment and maintenance of public and green areas. They are also responsible for sports activities, social and cultural services and the like.

The Special Provincial Administration (SPA) is another local government body at the provincial level. The decision making body is the Provincial Assembly with elected members. However, the head of the SPA is the Governor. SPAs make contributions to the economic and social development within the provincial boundaries. In this respect they are responsible for the establishment of infrastructure within various economic sectors such as agriculture, manufacturing, industry, mining, trade, tourism and services. They are also responsible for providing educational services for rural areas.

Village Administrations comprise the local government in rural areas. Village Headmen and Committees of Elders are the main decision making and executive bodies. They are responsible for the economic and social development of the villages, the management of common village assets and the establishment of necessary infrastructure.

2.5 NATIONAL LEGISLATION AND INTERNATIONAL CONVENTIONS

2.5.1 National Legislation

Bulgaria

Environmental Law

This Act regulates the social relations with regard to:

- protection of the environment for present and future generations, and protection of human health;
- conservation of biological diversity in conformity with the natural biogeographic characteristics of Bulgaria;
- the control and management of potential threats to the environment;
- control over the state of the environment and sources of pollution;
- the prevention and limitation of pollution;
- the establishment and management of the National Environmental Monitoring System;
- environmental strategies, programmes and plans;
- collection of, and access to, environmental information;
- the economic organisation of environmental protection activities;
- the rights and the obligations of the State, the municipalities, the the legal system and citizens with respect to environmental protection.

Protected Areas Act

This Act regulates the designation ands management of protected areas. The purpose of the Act is to conserve and preserve protected areas as a national and universal human wealth and assets, and as a special form of conservation of Bulgarian nature, conducive to the advancement of culture and science and to public welfare. Nature conservation within protected areas shall take precedence over the other activities therein.

Biodiversity Act

This Act regulates the relations among the state, the municipalities, the legal system and citizens with respect to the conservation and sustainable use of biological diversity in Bulgaria. The Act has the following purposes:

- conservation of natural habitat types representative of the Republic of Bulgaria and of Europe, including habitats of endangered, rare and endemic plant and animal species within a National Ecological Network including:
  - > - special areas of conservation which may incorporate protected areas;
  - > - protected areas outside special areas of conservation;
  - > - buffer zones around protected areas.
- conservation of the protected plant and animal species of the flora and fauna of the Republic of Bulgaria, as well as of those that are subject to use and trade;

- conservation of the genetic resources and the diversity of plant and animal species outside their natural surroundings;
- regulation of the introduction of non-native species, and the reintroduction of native plant and animal species into the wild;
- regulation of trade in specimens of endangered species of wild flora and fauna;
- conservation of centuries-old and remarkable trees.

Forest Act

This Act regulates the management and protection of the forests in Bulgaria. The purpose of the Act is to preserve Bulgarian forests as a national asset focusing on the sustainable and multipurpose management for the benefit of owners and the general public.

Other relevant National Acts are:

- Medicinal Plants Act
- Hunting and Game Protection Act
- Fishing and Aquaculture Act
- Territorial Planning Act

Turkey

Law on National Parks – No. 2873

The purpose of this law is to establish the principles for the selection of national parks, nature parks, natural monuments and nature reserve areas of national and international value, and the protection, development and management of such places without endangering their characteristics.

Law for the Protection of Cultural and Natural Values – No. 2863

The law identifies different protection and conservation categories for cultural and natural assets in order to preserve them, yet make them available for public use. The law specifies relevant measures to define assets, means of protection, and principles of planning and usage.

Environmental Law – No. 2872

The objectives of the law are to manage, protect and improve the environment in accordance with specific legal and technical principles, and in conformity with economic and social development. The main objectives are:

- To protect and make optimal use of land and natural resources in rural and urban areas;
- To prevent water, soil and air pollution;
- To develop and guarantee the standards of health and living conditions for present and future generations by preserving the nation's plant and animal life, and its natural and historical wealth.

Forestry Law – No. 6831

The law is the legal instrument to manage, to protect and to improve the forests according to constitutional, legal and technical principles. The main objectives of the law are:

- To manage the forests as a public good and sources of public wealth,
- To use forests in both an economical and sustainable manner,
- To protect the forests,
- To improve the quality of life of forest villagers,
- To protect natural life and biodiversity in the forests.

The law defines rules and principles for the following:

- Designation of forest areas, and routines of forest cadastral works,
- Principles of forest management plans,
- Designation of meadows and open spaces in protected forested,
- Principles of forestation,
- Principles of the production of forest goods, and rights and obligations of forest villagers.

Law for Specially Protected Environmental Regions – No. 88/13019

The law regulates the designation of environmentally sensitive zones, principles of scientific investigation and protection, and principles and standards for spatial planning.

Other relevant National Acts are (dates of enforcement are in parentheses)**:**

- Seashore Law - No. 3621
- Tourism Incentives Law - No. 2634
- Range Law - No. 442
- The National Afforestation and Erosion Combating Law – No. 4122
- Law on Land Hunting
- Law on Fishery Products
- Coastal/Shore Law
- Regulation on Environmental Pollution Prevention (1985)
- Regulation on Air Pollution Control (1986)
- Regulation on Noise Control (1986)
- Regulation on Water Pollution Control (1988)
- Regulation on Solid Waste Control (1991)
- Regulation on Control of Harmful Chemicals and Products (1993)
- Regulation on Environmental Impact Assessment (1993)
- Regulation on Medical Waste Control (1993)
- Regulation on Hazardous Waste Control (1995)
- Regulation on the Landfill Guideline (Revision in 1999)

2.5.2 International Conventions and Directives

	ratified by	
Relevant International Conventions	BG	TR
The Convention on the Biological Diversity (Rio Convention). The objectives of the convention are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including appropriate access to genetic resources and appropriate transfer of relevant technologies, taking into account all rights over those resources and technologies, and appropriate funding.	**x**	**x**
Convention on the Preservation of the Wild European Flora and Fauna and Natural Habitats (Bern Convention) has a threefold objective: to conserve wild flora and fauna and their natural habitats; to promote cooperation between states; and to give particular emphasis to endangered and vulnerable species, including endangered and vulnerable migratory species. Forty-five European and African States as well as the European Community are parties to the convention.	**x**	**x**
Convention on the Wetlands of International Importance (Ramsar Convention) is an intergovernmental treaty which provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources.	**x**	**x**
Convention on Migratory Species (CMS or Bonn Convention) aims to conserve terrestrial, marine and avian migratory species throughout their range. It is one of a small number of intergovernmental treaties concerned with the conservation of wildlife and wildlife habitats on a global scale. Since the Convention's entry into force on 1 November 1983, its membership has grown steadily to include 80 (as of 1 September 2002) parties from Africa, Central and South America, Asia, Europe and Oceania.	**x**	**-**
Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) aims to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being. Each Contracting Party to this convention shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.	**x**	**-**
Convention on Transboundary Environmental Impact Assessment (Espoo Convention) sets out the obligations of parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of states to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across borders.	**x**	**-**

The Convention on the Protection of the Black Sea against Pollution (Bucharest Convention) was adopted in 1992 (in force since 1994). Its objectives are to undertake all necessary measures consistent with international law and in accordance with the provisions of this convention to prevent, reduce, and control pollution in order to protect and preserve the marine environment of the Black Sea.	**x**	**x**
Convention on the International Trade in Threatened Floral and Faunal Species (CITES, Washington Convention)	**x**	**x**
Convention on the Preservation of the World Cultural and Historical Heritage (World Heritage Convention).	**x**	**x**
Convention on European Landscapes (Landscape Convention) aims to promote European landscape protection, management and planning, and to organise European cooperation on landscape issues. This means ensuring the protection, management and planning of European landscapes through the adoption of national measures, and the establishment of European cooperation between the Parties.	**x**	**x**

Relevant EU Directives	BG	TR
The EU Directive on the conservation of wild birds (79/49/EEC) seeks to protect all wild birds and the habitats of listed species, in particular through the designation of special protection areas (SPA). Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora aims to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Convention on Biological Diversity applies. In Bulgaria: transposition through the Bulgarian Biodiversity Act. In Turkey: starting the membership negotiations with the EU, Turkey agreed to implement the Habitats and the Birds Directives. The first step in this direction is the Twinning Project - Capacity Building in the Field of Environment for Turkey, Component 3 Nature, TR02-EN-01	**x**	**x**

Table 1: International Conventions and Directives

2.6 STRATEGIES, DEVELOPMENT PLANS AND RELATED PROJECTS

Bulgaria

The Bulgarian Biodiversity Foundation has been working in Strandja for more than 10 years and has developed a *Management Plan* for the Strandja Nature Park. The Plan, however, has not yet been officially adopted due to objections from local municipalities fearing that the plan will hamper structural developments within their areas. The Management Plan is presently under EIA procedure, due to be completed early in 2005.

The entire Strandja Nature Park is envisaged as a future NATURA 2000 site by an ongoing DANCEE/Ministry of Environment and Water Project: "*Conservation of Species and Habitats in Bulgaria*".

One of the priorities of the Bulgarian UNESCO Man and Biosphere Committee is the restructuring of the network of biosphere reserves in Bulgaria, including Strandja as a priority. One of the nature reserves within the Park, *Uzunbudjak*, has already been declared a biosphere reserve.

Strategies for the development of municipalities have been produced and approved in accordance with the National Plan for Regional Development 2000-2006.

The region of Strandja is also envisaged as a pilot area for funding under the SAPARD Programme.

The National Ecotourism Strategy and Action Plan for Bulgaria was developed in 2004 with the support of USAID, Bulgaria Mission under the Biodiversity Conservation & Economic Growth Projects I and II.

The Action Plan for Ecotourism in Strandja, the Black Sea Coast and Eastern Thrace was developed in 2004. It was coordinated by the Bourgas Regional Tourism Association (coordinator Sonia Enilova and consultant Ventsislav Panchev). and supported by USAID, Biodiversity Conservation & Economic Growth Project II.

The objective of the Important Plant Areas Programme (working also on identified sites in Strandja) is to identify and protect a network of the best sites for wild plants, fungi and their habitats around the world, and to ensure their long term survival. *Important Plant Areas* (IPAs) are natural or semi-natural sites exhibiting exceptional botanical richness and/or supporting an outstanding assemblage of rare, threatened and/or endemic plant species and/or vegetation of high botanical value.

In 1998, the Management Plans for Protected Areas of Silistar and the River Mouth of the Veleka River were developed with financial and technical assistance from MoEW and the Government of Monaco.

The Bulgarian-Swiss project dealing with sustainable management of forests is implemented jointly with all local Forestry Boards in Strandja, the Forestry University in Sofia and the Department of Forestry in Zurich. The project aims to identify optimal forestry systems for sustainable management of forests in Strandja, with a view towards conserving their biodiversity.

At the regional level, in Igneada, a joint Turkish / World Bank (GEF) project – Biodiversity and Nature Resource Management, GEF II – is furthering the protection of forests, alluvial forests and wetlands adjoining the Turkish Black Sea coast.

At the national level, a Turkish / German Twinning Project – Capacity Building in the Field of Environment for Turkey, Component 3 Nature (TR02-EN-01) – aims at the establishment of necessary institutional capacity to transpose and implement the following EU Nature Conservation Directives: The Birds Directive (79/409/EEC), the Habitats Directive (92/43/EEC), the CITES Convention, and related European regulations (EEC/362/82, EEC/3418/83 and EC 338/97).

Other relevant strategies and development plans are:

- Five Year Development Plans and their annual programmes prepared by the State Planning Organisation
- National Environmental Strategy and Action Plan
- Draft Strategy on Biodiversity
- Wetland Management Plans
- National Programme for Accession to the EU

3 LAND USE ANALYSIS AND RESULTS

This chapter includes the analytical results concerning the use of natural resources or so-called "land use sectors". Cross-sector relations and conflicts between competing land use strategies are addressed. Existing and potential cross-border cooperation opportunities are outlined.

3.1 URBAN AND RURAL DEVELOPMENT AND INFRASTRUCTURE

3.1.1 Settlements Network and Urbanised Areas

The settlement patterns in the Turkish and Bulgarian regions of the project area show considerable differences. While the Bulgarian Strandja lies close to the city of Bourgas, the fourth largest city in Bulgaria, Turkish Istranca forms a backwater, a transition zone to Bulgaria.

Links to Bourgas include: an airport receiving more than 50% of all charter traffic to Bulgaria, a large and active harbour, and a main railway connection. This contrasts with Turkish Istranca, linked only by road and a minor railway line (Alpulu – Kirklareli). However, road travel from Istanbul, with almost 10 million inhabitants, is easy (280 kilometres), as is travel from Edirne (80 kilometres). For this reason, the Istranca coast – 185 kilometres from Edirne and less than 200 kilometres from Istanbul – is now receiving a considerable number of day and overnight visitors during the summer season. These visitors turn off at Sarai and Poyrali, and never reach Kirklareli or the inland forest of Istranca. Thus, the short stretch of the Istranca forest receiving visitors from outside the province functions mainly as a transit zone to Bulgaria.

In contrast, the Bulgarian coast to the north and to the near south of Bourgas now forms an almost continuous stretch of habitations.

Corlu Military Airport, outside the project area and approximately equidistant from Istanbul and Kirklareli, at times functions as a secondary airport to Istanbul, predominantly receiving travellers from the former Soviet Union bound for Istanbul.

Kirklareli province is one of the smallest provinces of Turkey with no settlements exceeding a population of 100,000. The proportion of the population with agriculture as their main source of income is higher than in other parts of Turkey (averaging 42.4% in the year 2000, compared with 35% for the whole of Turkey. In contrast to Bulgaria, coastal settlements are small and few. The costal population is only 1.4% of the provincial population.

Presently, some development is taking place in the province through investments – notably from Istanbul – in the textile and food processing sectors.

There are no commercial harbours on the Turkish Istranca coast, only small fishing harbours at Kiyiköy and Igneada. A passenger service linking Igneada with Bourgas during the summer months is planned.

The Bulgarian Strandja Nature Park covers about 116.000 ha with a population of slightly less than 8.000 people and a population density of 6,9/km^2 (year: 2000). The boundaries of the Park comprise 21 settlements, of which 19 are villages and two – Malko Turnovo and Achtopol – are minor towns. Among the villages, 13 have populations below 200. All settlements cover only 0.6% of the Park area.

The forested Turkish Istranca area covers approximately 197.000 ha, including the Black Sea coast. Approximately 130.000 ha of this is true, dense forest. This area holds a population of about 25.000 people in 40 villages (44 settlements) and the population density is 12,7/ km^2.

Villages adjoining the core forest are spread over an area of about 396.000 ha of which approximately 220.000 ha is forest. These 103 settlements (99 villages) have a population of 58.700 according to the 2000 census.

3.1.2 Technical Infrastructure

Public Road Network

The total road network in the Strandja Nature Park has a density of 0.2 km/km^2, much lower than the average for Bulgaria which is 0,34 km/km^2. Main roads on the Bulgarian side of the project area are as follows:

- The first-class road ?– 9 (Bourgas – Sozopol – Primorsko – Tsarevo – Malko Turnovo)
- The second-class road ?? - 98 (Bourgas – Bosna - Zvezdets - Malko Turnovo – Turkish border)
- The third-class roads ??– 796, ??– 987 and ?? - 1012 (recently re-categorised as a fourth-class road ?V -90077 (Tsarevo - Rezovo)).

Taking the figures for the Strandja Nature Park into consideration, the road density of the region is about 0,2 km/km^2 and hence much lower than the average for Bulgaria which is 0,34 km/km^2.

The first class road ? - 9 – part of the international transportation corridor Durankulak - Varna - Bourgas - Malko Turnovo, providing international connections between the northern and the southern Black Sea coastlines – is gaining importance as a touristic road, especially the section Sozopol - Malko Turnovo, which serves the transportation needs of tourists during high season. This road is the main access route from the north-east to the Strandja mountains. It is expected that the use of this road by tourists will increase with the further development of the Strandja Nature Park, as well as with the re-categorising of this section of the road as a second-class road, with the complete transfer of transit cargoes to road ?? - 98. The access to the park will be improved substantially with the reconstruction of the road from Kiten to Tsarevo.

The main access from the north is by the ?? - 98, which provides the quickest and easiest access to the region. The condition of the road is generally good, with the exception of sections prone to landslides.

For the eastern part of the Strandja region, a second northern access point is of major importance, namely the road ??– 1012 (Tsarevo - Rezovo). At the moment, it has been only partially rehabilitated. Its importance will increase after the expected opening of a border control point in Rezovo, which will also transform it to a part of the Black Sea touristic road ring.

The road ??– 796 provides access to the project region from the west. The condition of this road is rather poor, and its width does not correspond to its class. The third-class road ??– 987 is of minor importance as an access to Strandja.

At the local level, the most important is the fourth-class road ?V - 79612, which connects the villages of Bliznak, Evrenozovo and Zvezdets. The remaining fourth-class roads are feeder roads from the main road network to forest settlements.

The quality of the roads in the Strandja region is unsatisfactory. Despite the fact that 96% of the roads have asphalt-concrete surfacing, almost 60% of this pavement is worn out or destroyed. For this reason, large sections of the roads do not meet the legal requirements for the various road classes.

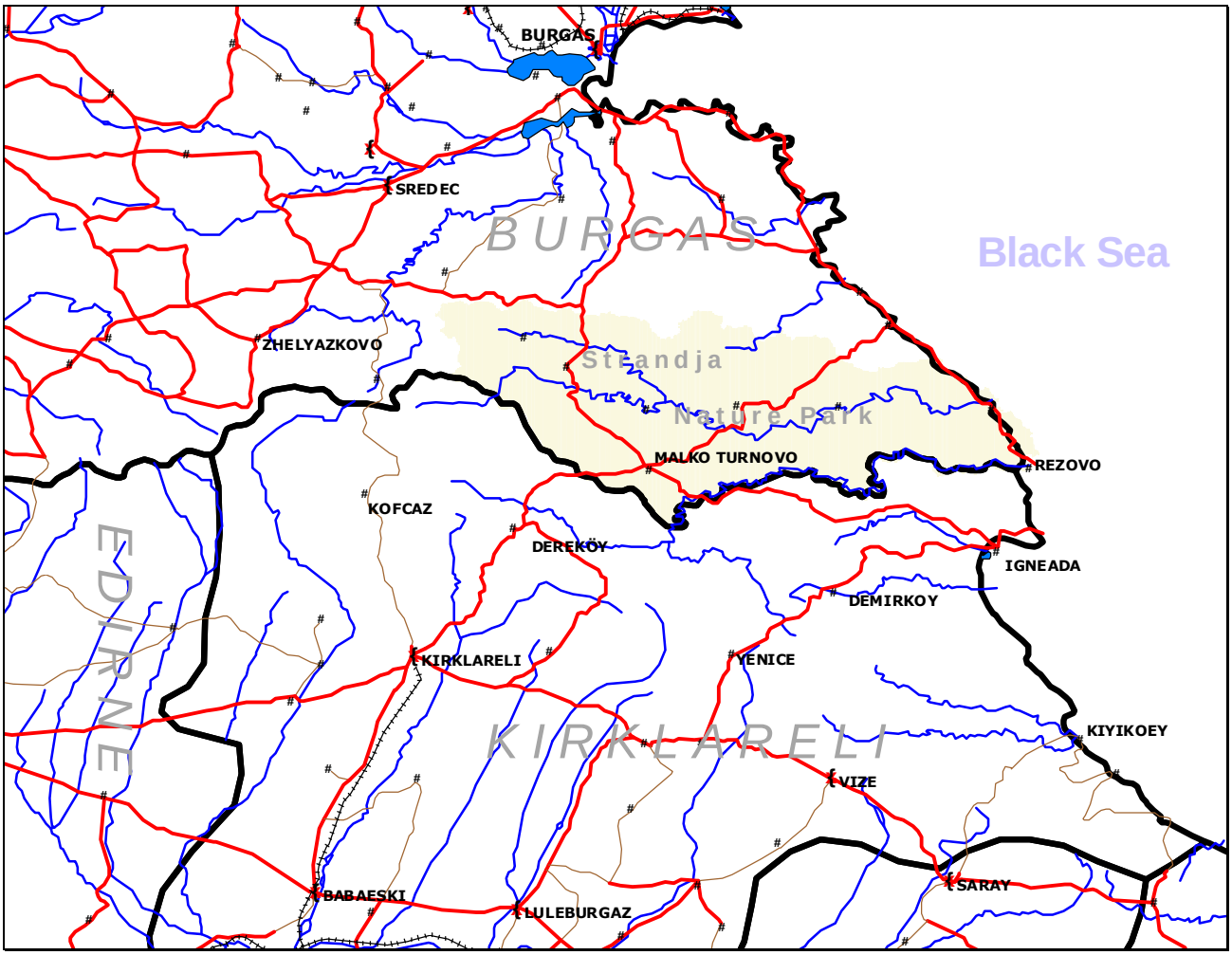

Figure 4: Road and River Network in the project region.

The main backbone of the Edirne and Kirklareli Provinces (NUTS 2 Sub-Region) is the 65 kilometre long section of the TEM E 80 Trakya Motorway, which connects Istanbul with Bulgaria and Western Europe. Another important axis is the D 100 state road (79 kilometre in the provinces) which reaches from Istanbul to the Bulgarian border. In addition to these main highway connections, the E 87 (Pehlivanköy – Babaeski – Kirklareli – Dereköy, and across the border further to Malko Turnovo and Bourgas) is the main south-north axis through the Turkish part of the project region.

Kirklareli province is connected to Istanbul and Bulgaria by roads of good quality. In contrast, the pavement of the secondary roads is often of poor quality and locally needs to be renewed. The length, type and density of roads within the project area are shown in the table below:

Sub-Provinces	Motorway (km)	State Roads (km)	Provincial Roads (km)	Village Roads (km)	State and Provincial Roads per km^2 (m)
Kirklareli Sub-district	0	101	45	445	91
Demirköy	0	37	5	175	44
Kofcaz	0	0	11	160	20
Pinarhisar	0	63	18	132	139
Vize	0	29	76	222	94
TOTAL	0	230	155	1 134	90

Table 2: Road Conditions by Sub-Districts in the Kirklareli Province (Source: Kirklareli Governorship, Directorate of Planning and Coordination, 2005).

Forest Roads

The project area is comparatively evenly served by forest roads with the exception of the area close to the border. Roads run primarily along mountain crests, rivers, and the coast. Forest roads with no gravel cover, and roads with gravel cover only, are mostly in poor condition. In both cases this is often due to faulty road construction and to lack of maintenance of bridges, drainage and road surfaces. Some roads have become defunct due to landslides, breakdown of bridges, etc.

Transportation Service

The main means of transportation within the Strandja region in Bulgaria is by private car. The nearest airport is in Bourgas, and the nearest railway stations are in Bourgas and Elhovo. Public water transport was abandoned during the last decade.

Public and private bus and minibus services within the region are erratic, while bus services along the coast are determined by the tourist season.

The main means of transportation to Turkish Istranca is by private car and bus. There are frequent daily mini-bus services from Kirklareli to Demirköy, Kofcas, Igneada and Kiyiköy.

3.1.3 Water Supply, Sewerage and Waste Disposal System

Water Supply

The main reservoir supplying household water to the eastern coastal section of the Bulgarian Strandja region is the dam of Yasna Polyana on the Dudenska River. The dam has a a volume of 27,3 million m^3 and supplies the settlements of Achtopol, Varvara, Sinemorets and Brodilovo. Other settlements in the region have their own water supplies.

There is a noticeable shortage of drinking water in some settlements, predominantly those located in the inland sections of the Park. Households here are dependent on individual water sources.

In Turkish Istranca, supply systems for household water have been established in most locations within Kirklareli province, and supply systems are being operated by the municipalities. Almost all rural settlements have sufficient potable water (see also Table 3). Maintenance, however, is a major problem as water losses from the distribution systems are extensive.

Sewerage System

The sewerage system and systems for waste water disposal in the Strandja / Istranca project region are underdeveloped.

Within the Strandja Nature Park area, only 5 of 21 settlements have partial sewerage disposal systems. Even in towns or villages with an existing sewerage system, no sewage or waste water treatment takes place. The sewage from the coastal settlements flows directly into the sea. In Malko Turnovo and Gramatikovo, it ends up in nearby ravines. Other settlements are using septic tanks or drainage. Public camp grounds are equipped neither with permanent nor with mobile sanitation facilities.

The building of Purification Station for Waste Water (PSWW) for the settlements of Tsarevo, Achtopol, Malko Turnovo, Sinemorets and Varvara is a priority task highlighted in all planning documents, including: the Territorial Master Plan for the Municipality of Tsarevo, the local strategies for the social and economic development, and the District Regional Development Plan. Because of the crucial importance of a PSWW serving Tsarevo for the protection of marine areas, a special project was proposed for this location, the implementation of which was initiated at the beginning of 2001. For the Municipality of Malko Turnovo, a project for PSWWs has been developed, while lands have been allocated for the settlements of Achtopol, Sinemorets and Varvara.

In the Turkish project area, wastewater treatment is almost non-existent outside of major towns. Notably, waste water on the Black Sea coast is being led directly into the longos (alluvial forests) and into the Black Sea. Only 3.7% of villages have a sewage treatment facility, as shown in the table below:

Sub-Districts	Number of villages	No. of villages with piped water network	No. of villages with sewerage network
Kirklareli Sub-District	41	41	2
Demirköy	15	15	0
Kofçaz	16	16	0
Pinarhisar	13	13	1
Vize	23	23	1
Kirklareli Province Total	**108**	**108**	**4**

Table 3: Water and Sewerage Infrastructure in Rural Areas in Kirklareli Province. Source: Kirklareli Governorship, Directorate of Planning and Coordination, 2005

Waste Disposal

At present, waste collection and transportation in the project region is inefficient, beset by high costs and unsatisfactory quality. Because of tourist developments in the coastal zone and related construction activities, substantial amounts of household and construction waste is generated, and the constant increase in the quantity of solid waste is creating serious problems.

In the Turkish project region, there are no environmentally sound solid waste disposal facilities. This is causing significant problems, notably in Igneada and Kiyikoy on the Black Sea coast.

In the Strandja Nature Park, there are four legal and an unknown number of illegal waste dumps, most of which are located along the watershed of the Veleka River. The majority of the legal waste dumps are outdated and leaking.

The waste dump of Achtopol is located in the estuary of the Veleka River Protected Site, despite a project for its closure and relocation. The waste dump is used for solid household and construction waste from the settlements of Achtopol, Varvara, Sinemorets and Rezovo, as well as for solid wastes from recreational facilities in the region.

The control of waste collection and transportation is carried out by the municipal administrations. All municipalities have developed programmes for waste management.

3.1.4 Possible Activities under CBC-Measure 2.2

Due to the problem of double funding, it is not possible to consider major investments under the CBC/Priority 2/Measure 2.2 (infrastructures are foreseen under CBC/Priority 1 and CBC/Priority 2/Measure 2.1). Nevertheless, smaller local investments –such as the installation of waste bins or environmental friendly parking areas in eco-touristic destinations – might be eligible under the Small Grant Scheme as foreseen in the project fiches. The planning of small investments of this type should be coordinated with activities in the neighbouring country in order to generate a cross-border effect.

3.2 AGRICULTURE AND COMMERCIAL FISHERIES

3.2.1 Agriculture

Together with forestry, agriculture has traditionally been a leading economic sector in the region. The ownership structure is similar on both sides of the border, with a predominance of small-sized holdings. There are many part-time farmers who also are engaged in other activities.

Recent developments have seen the disbanding of collective farming and the return of land to its former owners on the Bulgarian side of the border.. The progressive depopulation of rural areas, and a high fragmentation in land ownership, have often resulted in disorganised cultivation or in the abandonment of arable land.. To a certain degree, this has led to a shift of the labour force to the industry on the Turkish side of the project region.

The table below illustrates the distribution of arable and forested land in the provinces of Bourgas and Kirklareli. Of course the percentage of agricultural land is decreasing in the mountainous area in favour of an increase in forests. For instance, the forest percentage of the border area in Strandja Nature Park exceeds 80%. Indeed, in this region the natural succession of abandoned land leads to an even higher forest density, which will change the overall character of the landscape in the long term.

	Total Area in km²	% of national territory	Agricultural Land (%)	Irrigated Area (%)	Forests (%)
Bourgas (2001)	7.748	7,0%	51.6%	2,6%	40,5%
Kirklareli (2000)	6.550	0,8%	37,8%	6,9%	38,8%

Table 4: Distribution of Agricultural Land and Forests

Bulgaria

Agricultural land comprises around 40% of the Strandja territory. The indicator 'arable land per person' is one of the highest in the country – 1,92 ha/person, the national average being 0,63 ha/person.

During the past ten years, the comparatively favourable climate and natural resources have been insufficiently utilised. The percentage of cultivated land and of irrigated areas has diminished. Today, there are vast parts of the land in the three border districts that are left untended. This is partly due to the depopulation of the countryside, and is partly a consequence of the dissolution of collective farms. This has resulted in fragmentation of ownership with the creation of numerous very small agricultural properties – properties which owners sometimes have neither the resources nor time to cultivate. Moreover, the arable land is generally situated irregularly.

Average incomes have decreased seriously due to: deficiency of financial resources; lack of adequate agricultural machinery; and an insufficient supply of spare parts, seeds, seeding material, fertilizers, plant medicines and other inputs. This has caused a serious drop in quantity, and deterioration in the quality of agricultural production. The decrease in yields in recent years has resulted in considerable losses sustained by farmers, lost markets abroad and weak positions on the local market. This situation is also a consequence of the lack of sufficient investment, competition from subsidised agriculture, and competition from processed food products, vegetables and fruits imported from Turkey, Macedonia and Greece.

Pastures and natural meadows are good resources for development of cattle and sheep breeding. Most of these are situated in the municipalities of Elhovo, Svilengrad, Sredetz, Bolyarovo and Ivailovgrad, but at present this natural resource is not effectively used.

Livestock breeding has traditionally been the leading occupation of farmers in the Strandja region. The sector is predominantly in private hands, with a great number of small farmers raising animals at their households. Basic problems in this sector are tied to its mainly extensive character, high prices of forage, low sale prices and massive imports of animal products. All these factors hinder the development of livestock breeding and demotivate breeders to invest in the expansion of their businesses.

After the termination of state cattle breeding, the total number of cattle has decreased dramatically, although during the past few years a small increase has been registered. The most serious decline is in sheep breeding. Here the lowest total number of animals was registered for the period between 1990 and 1999 (Source: Draft Strandja Nature Park Management Plan). During the same period, the number of goats increased, replacing the number of sheep. Domestic pig populations also decreased during this period.

Strandja is well known for several local breeds such as the eastern-Balkan pig, the Strandja sheep and grey cattle. These are still found in the area in nearly pure genetic forms. To ensure the survival of these breeds, two livestock breeding farms have been included in the Bioselena Foundation Project for the Preservation of Rare Indigenous Domestic Breeds.

The serious agricultural decline in the region is mostly the result of high production and transport costs, and the lack of market accessibility. For this reason, the introduction of organic farming will require a substantial effort by the local authorities, as well as the support of the State. In 2000, an interesting venture to cultivate truffles started in the Strandja region. Also, herbs are now being cultivated in the region, mainly on marginal land.

Significant support is expected from the National Plan for Development of Agriculture and the Rural Regions, the UNDP/MAF Project for Rural Development of the Strandja / Sakar region, and the SAPARD funding tool, under which the region is a pilot project area.

Turkey

In the year 2000, the agricultural production of the two provinces of Kirklareli and Edirne accounted for about 2% of the national output. Agriculture and forestry, employing about 49% of the total active workforce, are the most important economic sectors on the Turkish side of the project region.

This employment level is much higher than the national average (35% in the year 2000) for these sectors. In the province of Kirklareli, however, over the decade 1990-2000 there has been of a drop in the number of workers engaged in agriculture (from 53.5% to 48.2%). This was offset by a job conversion to industry that has been increasing from 10,1% to 17,8% of the total active labour force.

Intensively used agricultural land, such as that in the region of Kofcaz, is becoming exposed to extended soil erosion. This is one of the major problems of overgrazing, and is the reason for the establishment of the TEMA Foundation (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats). TEMA Foundation's primary goal is to raise public awareness of the dangers of desertification resulting from widespread soil erosion within Turkey. Projects to rehabilitate eroded land should consult the expertise of this foundation.

3.2.2 Fishery

Commercial fisheries along the Bulgarian Strandja coast are predominantly for local supply. According to the data of the Municipality of Tsarevo for 1999, the total number of fishing boats is 219. Only one fishing cooperative – in Achtopol – is registered at present. The reproductive capacity of most species of economic importance is considered stable.

In Turkey, the small town of Kiyiköy (population: 2,500) has a dynamic fishing harbour and an active fishing community. The total Kiyiköy fleet comprises 108 boats, mainly small trawlers; there are only 20 boats with over 100 horsepower.

As large trawlers, such as those harboured to the north and south of Strandja / Istranca, form the main threat to fish populations in the Black Sea, the impact of fishing from the Strandja / Istranca shores is of minimal importance.

It is not possible to clearly determine the development trends for commercial fisheries, because of the lack of statistical data on the quantities and the structure of the fish yields in this region.

Nevertheless, it is obvious that the fisheries will remain a crucial element of the local lifestyle, in addition to providing supplies for the tourism sector.

3.2.3 Possible Activities under CBC-Measure 2.2

As stated in the CBC Joint Technical Document, in recent years, some Turkish farmers have rented agricultural land in Bulgaria. This could have been the beginning of a mutually advantageous cross-border cooperation. However, this activity has now almost stopped because the cost of the visa, customs duties to carry the crops produced into Turkey, and long waiting times at the border considerably reduce the interest in such an investment, and actas a disincentive to entrepreneurs.

Another promising initiative for sustainable cross-border cooperation is “Köy Koop”, an agricultural cooperative with some 10.000 members. The cooperative has a milk processing factory nearby Vize and is marketing its products as “Istranca” milk, cheese, yoghurt, etc. The cooperative has already trained some 3000 farmers in organic farming, and the process to obtain an EU-conform certification has started. According to the cooperative’s director, the cooperative is open towards any proposals to extend its activities across the border to Strandja.

At the round table meeting in Kirklareli (see Annex 5.6), various project proposals for the CBC programme were made, ranging from the introduction of viniculture and the planting of orchards with linden, chestnut and walnuts, to the general support of organic farming initiatives, to plans for land consolidation. A Grant Scheme is foreseen in the 2006 project fiche to address all those proposals which meet the Grant Scheme guidelines. In addition. an agricultural development plan will have been completed within the Technical Assistance component as foreseen in the Turkish 2006 fiche.

3.3 MULTI-PURPOSE FORESTRY AND WILDLIFE MANAGEMENT

3.3.1 Current Situation

Most of the project region is covered with forests. The forest density reaches more than 80% along the border, and decreases towards the lowlands north and south of the mountain ridge. Due to the natural succession of abandoned arable land, locally there is a tendency for a further increase of the forest percentage.

The dominant forest types in the project region are **Rhododendron - Oriental Beech Forests** and **Thracio - Euxinian Mixed Forests** (EEA/EUNIS habitat classification). In addition to these nature-like forests, a significant part of the area is covered with 20-40 year-old **pinus plantations** (mainly *pinus nigra*).

The **oriental beech forests** of the Strandja / Istranca mountains are dominated by *Fagus orientalis*, often accompanied by *Carpinus betulus, Carpinus orientalis, Tilia tomentosa, Tilia cordata, Tilia platyphyllos, Quercus polycarpa, Acer platanoides, Acer campestre, Ulmus glabra, Sorbus torminalis, Sorbus domestica* and *Prunus avium*. The understorey is rich in *Lauriphyllous* shrubs of Euxinian affinities, comprising, in particular, *Rhododendron ponticum, Daphne pontica, Prunus laurocerasus (Laurocerasus officinalis), Pyracantha coccinea, Ilex aquifolium*and *Ruscus hypoglossum.* In the herb layer one finds *Euxinian Primula vulgaris ssp. sibthorpii (Primula rosea), Trachystemon orientalis, Teucrium cuneifolium, Cyclamen coum, Epimedium pubigerum, Hypericum calycinum* and *Scilla bithynica*.

The **Thracio-Euxinian mixed forests** are species-rich forests in the mountains of the western and south-western Black Sea region and Strandja / Istranca. They are composed of *Quercus polycarpa, Quercus cerris, Carpinus betulus, Carpinus orientalis, Sorbus torminalis* and *Fagus orientalis,* with a varied, multi-species shrub and herb layers containing many Euxinian elements.

Also, the pinus plantations can be found on both sides of the border. They were planted some 20-40 years ago, and are typically characterised by a poor vertical and horizontal stand structure. Although the winter green canopy is nice to look at when driving through the mountains in winter, the plantations have a poor ecological value, being less suitable for biodiversity and soil protection. The management is normally done by a cut-and-plant system with a low rotation age, instead of regenerating the stands naturally by means of seed trees and selective tree cutting. According to the Strandja Nature Park administration, there is no further increase of pinus plantations foreseen; on the contrary, the forest management endeavours to reduce their proportion.

Generally forests have a wide range of values. They play an important role in watershed management, and are sources of many products, including: traditional wood products (lumber, wood fibre, fuel wood); fruits and nuts (e.g., wood crop species of walnut, chestnut, pine nut, etc.); medicinal plant products; and ornamental plants.

In the project area, forestry is an important factor in terms of the sustainable management of natural resources, as well as an income generating factor for the local population. The Strandja / Istranca forests are a resource for medium density fibreboard (MDF), furniture, parquet, fuelwood and pulp and paper. But at the same time, forests are a biotope for flora and fauna, and an attractive destination for recreational outdoor activities.

A forest can only fulfil all these functions if it is correctly managed. Originally, sustainable forest management referred only to timber exploitation and wood yield. But the modern principles of sustainable management also include the protective and recreational functions of forests.

Production function

The production function includes economic aspects of forests:

- Provision of wood – a renewable and important carbon-fixing raw material;
- Provision of raw material for local timber, fibre, fuelwood, and pulp and paper industries;
- Provision of income for public and private forest land owners;
- Provision of a place of work for many people in rural areas.

Protection function

Additionally, old growth forests fulfil several other functions for humans and their environment:

- Regulation and regeneration of fresh water resources;
- Protection of fertile soils and of steep slopes from erosion;
- Protection from snow avalanches and rock debris;
- Climate control;
- Filtration and purification of polluted air;

- Reduction of the greenhouse effect by long-term fixing of CO2 by wood;
- Protection from noise;
- Protection of biotopes and endangered species;
- Protection of and positive impact on natural scenic beauty.

Recreation function

Forests are an ideal place for recreation and an attractive area for outdoor activities. In general, forests should be accessible by everyone. Only in areas with a high ecological value should restricted access be considered.

Forests are part of local culture

Forests are also a cultural asset. They are often associated with the people's homeland. Woods and trees play an important role in old fairy tales, literature, poetry, music and art.

Bulgaria

Forestry in Bulgaria, and accordingly in Strandja, is developed according to 10-year Forest Management Plans (FMPs) prepared by the local State Forestry Boards (SFB). The following paragraphs describe the situation within the borders of the Strandja Nature Park.

Approximately 80% of the Park is covered with forests. The total timber reserve amounts to 3.7% of the forest stock in Bulgaria. The average stock of timber is 191 m^3/ha, while the average for the country is 141 m^3/ ha.

In general, the FMPs include plans for a reduction in timber harvesting because of the deteriorating condition of oak forests. This has resulted from overexploitation occurring in the 1950's and 1960's. Indeed, due to administrative and economic reasons, recent years have seen a reduced timber harvest.

In the 1990's, an unfavourable trend of not accomplishing the planned thinning was continued. This has further contributed to the degeneration of timber quality. In the Park, applied scientific experiments are being carried out for the introduction of regeneration felling with an enlarged rotation age. In addition, thinning experiments have been done using a methodology of early individualisation (selection of the best quality trees to remain in the stand for the future). This has now been approved for implementation.

The logging practices are based on the use of the motor saws, modified agricultural tractors, animal power and 1-2 wire-lifts. This requires the construction of a dense network of temporary forests roads. For the normal use of the forests in the 1998-2008 period, the FMP envisages the construction of new roads, and the repair of old stabilised roads to a total length of 99 km.

About 450 people are employed in this forest service sector. Of these, 250 are involved with the logging and transportation of timber. Another 50 are involved with forest maintenance. The remaining 150 are administrative staff and park wardens. The above figures are considered to be insufficient for the implementation of the FMP.

According to the FMP, 48% of the forested area is available for grazing. These grazing areas are significantly underused in terms of their capacity. However, both present and long term needs must be considered, including the use of the forests for grazing of goats and pigs – currently unregulated and allowed despite the nature conservation regulations of the territory.

As in the Park, unregulated grazing by pigs and goats is observed in the territories adjacent to the Park. And the pressure on the natural resources in areas peripheral to the Park – such as herbs, mushrooms, forest fruits, game and fish – has followed the same trends as in the Park territory.

The relative importance of the various uses of the forests can be judged on the basis of the income raised. An analysis for 1998 indicates that income from secondary uses is insignificant – some 0.2% of the total. This is mostly generated through the extraction of wood from the regeneration felling and the thinning. Additional income is generated by the collection of important non-timber products, namely medicinal plants, mushrooms and wild fruits. The trends in forest use during the 1996-2001 period are reviewed below in Section 3.3.2.

The Strandja forests outside the Park include those managed by the State Forestry Board (SFB) of Sredets, the State Forestry Service (SFS) of Novo Panicherevo, and the SFS of Tsarevo. They also include the municipal forests of the Primorsko Municipality, the cooperative forests of the Cupertino of Byala Voda, and a number of restored private forests. The areas of forest adjacent to the Nature Park are located in the water catchment basins of the dams of the Novo Panicherevo, Yasna Polyana, Indje Voevoda and Rakov Dol.

The present use of the forests adjacent to the Park is regulated by forest management plans. The management systems employed are identical to those used for the forests within the Strandja Nature Park. The influence of commercial interests in these adjacent forests during the last century has been higher because of their proximity to the main consumers of timber in Bourgas.

In the settlements adjacent to the Park, some 10 private wood-processing factories for the production of parquet have been established, each with an annual capacity of some 2000 m^3 of timber. The main consumer of industrial wood – up to 880.000 tons annually is the factory of Bulles in Bourgas, which uses predominantly timber from coniferous trees. The use of broad-leaved industrial wood and firewood has recently been decreasing because of limited markets.

The restitution of forest ownership to the municipalities and to private individuals will probably result in increased pressure for their use. This is mainly a risk for coppice stands which are maintained to be transformed to high forest stands.

Turkey

A big part of the Strandja / Istranca forest (about 130,000 hectares) is located within the territory of the province of Kirklareli. Almost 100% of the forests in Turkish Istranca are state owned and locally administered by the forestry districts in the region (for instance Demirköy, Dereköy, Kofcaz, Kiyiköy, etc.) which are under the Forestry Directorate in Kirklareli and Vize. The operational management is based on a forest management plan in a 1:25.000 scale, which is updated every 20 years. 1:10.000 scale planning maps are available for the operational management.

90% of the wood production is sold to medium density fibreboard (MDF) factories in Thracia. Uses of the remaining 10% include the production of fuelwood, parquet and high quality timber for furniture. In general, three different forest management systems are used: Oak (*Quercus robur, Quercus petreae*) and beech (*Fagus orientalis*) stands are either managed using: (a) a coppice system with a rotation age of about 20-40 years, or (b) selective tree cutting, including thinning and maintenance cuts before the trees are harvested at an average age of about 120 years. The third silvicultural system is (c) a cut-and-plant system

used for the pinus (mainly *Pinus nigra*) plantations, first planted in the early 1970's, usually on marginal and eroded land.

The majority of the forests are managed as coppice stands. A relatively small area is covered with pinus plantations, and an increasing proportion are old growth oak stands (mainly in the forestry district of Demirköy). Fortunately, the forest administration is well aware of the silvicultural advantages of the selective cutting system, and is planning to increase the percentage of old growth oak stands, preferably on the coast in the Demirköy forestry district.

Advantages of selective cutting include the possibility of regenerating forests with seed trees in a natural way. The higher rotation age (this term becomes obsolete in nature-like stands) results in a diverse horizontal and vertical stand structure, and in improved tree health, soil conditions and erosion protection. It is important to be aware that the power for stand rejuvenation in a coppice system continuously decreases over time and, and as in the pinus plantations, the negative impact on biodiversity is significant. In addition to the lower ecological value of silvicultural systems with such a low rotation age, the capability of the forest to work as a freshwater resource is limited, as is its suitability for recreational activities and its contribution to the aesthetics of the forested landscape.

In summary, increasing the rotation age is one of the most important future challenges for forest management in the region.

On the other hand, the coppice system is a traditional form of regional forest management which is very much dependant on the labour force of the villages. The following paragraphs attempt to illustrate the socio-economical significance of the different systems:

Organisation of coppice system

The municipalities are paid by the government for cutting and transporting the wood to a central depot. They can buy the wood from the state and sell it directly (counter balancing of services – information from Vize).
Harvesting is done by villagers (in Demirköy, 300 workers, i.e., some 10% of the total population is working in the forests) but the income is low. If there are no villagers available to do the job, harvesting and transport is done by private companies that buy the standing trees.
The state earns income by selling the trees to the wood industry, and by renting land (e.g., there are 49 year leases for mining or other purposes).

Economical figures from the forestry district of Demirköy

The forest area plus open spaces in the district is about 90.000 ha and some 300 workers from the village Demirköy are working in the forest.
Selective cutting is practiced in Demirköy, Igneada and 14 other villages in the district. The total amount of the annual harvest volume ranges from 30.000 to 40.000 cbm. The government pays the villagers for their work, e.g., cutting: 5 US$/ster (1 ster = ca. 0,8 cbm), logging: 10 US$/ster, transport to depot: 20 US$/ster (indicative figures). In 2003, the labour income for villagers was ca. 4,2 M.YTL (ca. 2,3 M€).
In 2003, each of the 300 workers in Demirköy earned an average of some 1660 € per year (a total of 1,1 M.YTL, which is the top salary of all villages).
At the depot, the wood is sold by tender. The net profit for the government is similar to the labour income for the villages, i.e., 2 M€ per year.

The *clearcut system* is practiced in Igneada, Begendik and Limanköy. The total amount of wood logged in 2003 was about 53.400 ster. Villages can buy 1 ster for 10 US$ from the government, and then can resell it directly. In 2003, the income from clear cut activities for the villagers was ca. 360.000 YTL (ca. 210.000 €). The net profit for the government was about the same amount.

Productivity per ha is based on the total amount for both systems (about 4.5 M.YTL or 2,5 M€ from 90.000 ha), which is about 25€/ha (labour income for villagers or net income for government).

Non-Timber Products

In addition to the income possibilities from the wood production, there are several other opportunities to earn money from by-products (some of these were also addressed by the Worldbank GEF project in Demirköy). Income generating activities include the planting of walnut (*Juglans regia*) orchards or poplar plantations. Often, extended poplar (*Populus spec, tremula*) stands, planted for private income, can be found on abandoned agricultural land along riverbanks (for instance, near Igneada). These private initiatives are causing conflicts with nature conservation, because these plantations are often planted on alluvial river planes of high ecological value.

Another income generating activity is the production of honey or marmalades made from forest fruits such as *Cornus Mas, Crataegus monogyna, Rubus spec*. This was done in an initiative promoted by the GEF project in Igneada.

During the course of regular forest harvesting operations, infrastructure for outdoor and forest recreational activities are developed indirectly, e.g., forest roads can be used for outdoor activities, and to reach smaller recreation facilities with campfires (e.g. in the Kofcaz Forestry District). On the other hand, these recreational activities can have a negative impact by increasing the risk of man-made fires or by spoiling the scenery with garbage.

Another important forest function which must be considered in sustainable forest management is the forest's capacity to store and provide fresh water for the population. This is illustrated in the following example from Istanbul.

Istranca Forests as an important reservoir for Istanbul's freshwater supply

Istanbul is Turkey's largest city with a current population of over 12 million. It is growing at an average rate of 3.5% per annum. This population growth has lead to an increasing demand for potable water. In the last decade alone, water consumption has tripled. There are several water reservoirs in the forests on both peninsulas of Istanbul which have been providing the city with water for centuries.

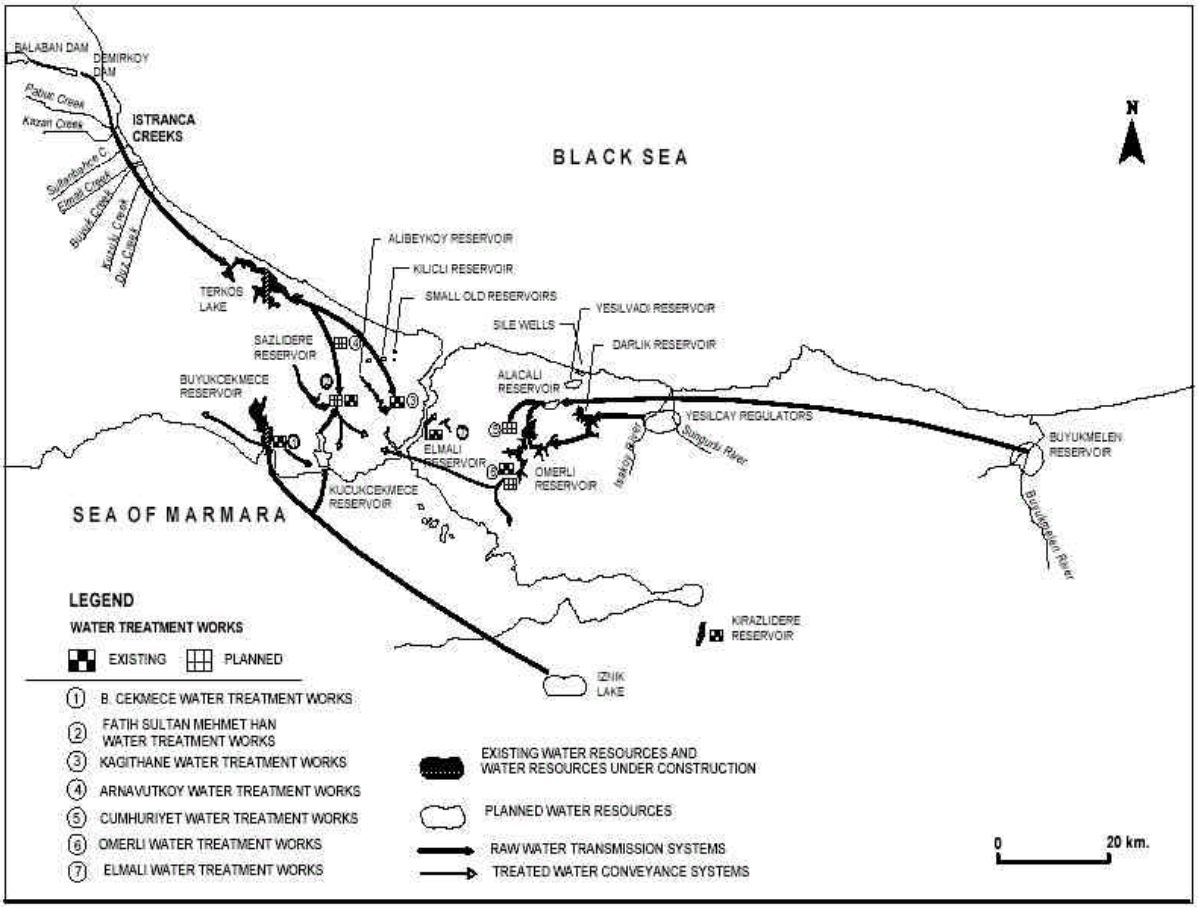

Figure 5: Fresh Water Supply System with pipelines from Istranca to Istanbul (source: A. Demirci and A. Butt (2001): Historical overview and current trends in Istanbul's water supply development. In: Globalisation and water resources management: the changing value of water. August 6-8 Awra/Iwlri-University of Dundee International Specialty Conference 2001).

The major water resources are on the periphery of Istanbul, and are owned by the Ministry of Forests. At one time, all the drinking water in Istanbul came from Belgrad forest, on the European side of the city. Today, the existing reservoirs are threatened by increasing pollution and illegal development, and the requirement for water has forced the city to look further a field for its supply. Water now comes from ten different sources**.** Recently, **six new dams** were built to bring water from the Istranca forest to Istanbul, 200 km away. The fact that Istanbul is making immense investments to use such remote water resources shows that the Istranca region has become an important sustainable reservoir for fresh water, and an significant planning subject for the development of Istanbul.

3.3.2 Collection of Medicinal Plants, Wild Fruits and Mushrooms

The local population traditionally collects herbs, spices, wild fruits and mushrooms for home use. The quantities collected for home use are difficult to analyse because of the lack of basic data. The preferred herbs and wild fruits include: St. John's Wort (*Hypericum perforatum*), wild thyme (*Thymus spec*.), dog rose (*Rosa spec*.), common hawthorn (*Crataegus monogyna*), stinging nettle (*Urtica dioica*), crab apple (*Mallus sylvestris*), sloe (*Prunus spinosa*), check tree (*Sorbus domestica*) and cornell tree (*Cornus mas*). The most popular edible mushrooms include parasol mushroom (*Macrolepiota procera*), edible boletus (*Boletus sp. div*.) and Caesar´s mushroom (*Amanita caesarea*). These plant resources are a traditional part of the local Strandja cuisine and lifestyle.

The collection of medicinal plants, wild fruits and mushrooms for commercial purposes is also a traditional occupation of some of the people living in the Strandja Nature Park.

The following figures are based on a questionnaire given to people directly involved with non-timber products management and/or commercial activities in the Strandja Nature Park between 1996 and 2001.

During this period, the questionnaire was used to collect information on the harvesting of 9 species of herbs, 3 species of wild fruits and 2 species of mushrooms. The volumes of the collected herbs and wild fruits varied from 1.100 kg/year to 4.686 kg/year, with the exception of the years 1996, 1997 and 1998 in which a large volume of purchased quantities (up to 96.910 kg) was the result of increased demand for St. John's Wort. During the analysed period, permits for the collection of 137.496 kg of herbs and fruits were issued. The collected species are among the commercial priorities at the national level where many tonnes are traded. Once during this period – in 1991 – a permit was issued by the MoEW authorising the collection of 50 kg of belladonna root (a restricted species).

The quantity of mushrooms that can be collected for commercial purposes is generally limited to 30.315 kg. The edible boletus and the chanterelle are of comparatively permanent commercial interest, but collection is strongly influenced by changes in yearly crops and in market demand.

The trade in non-timber natural resources is supported by a commercial infrastructure, which at present includes some 20 permanent primary processing stations. Of these, the most active are located in the settlements of Zvezdets, Malko Turnovo, Kosti, and Brodilovo The number of gatherers (both local and from other regions) is not known.

According to the data of the Nature Park Directorate, some 140 gatherers from other regions arrive seasonally, mostly from Shumen, Ruen and Kotel. Most gatherers are young, usually with only primary education and from Roma or Turkish families.

Collecting plants in regions outside those authorised by the permit, collecting without a permit, collecting in a unsustainable way, and collecting greater quantities than those specified on the permit are the main violations occurring in the region.

3.3.3 Wildlife Management

Habitats for large game species are predominant in the project region. Ungulate mammals that are hunted and permanently or temporarily inhabit the territory are the red deer, the roe deer and the wild boar.

While the roe deer is seen widely throughout the area, the red deer is found mainly in the SFS of Tsarevo, in the SFS of Gramatikovo (at Studenata Voda and Kabrancha), in the SFS of Zvezdets, in the region of Bosna, and in the habitats between the Veleka and Mladejka rivers. The SFS of Kosti is inhabited by individual species that are in permanent migration. A migrating group of some 5-10 species has been seen in the SFS of Malko Turnovo.

Like the roe deer, the wild boar is widely distributed in the area. In the early 1990's, a plague among the wild boar decreased the population temporarily. The population has recovered during recent years. Cross-breeding between the wild boar and the eastern-Balkan domestic pig is often registered.

The hunted carnivores, according to the Hunting Act, are the wolf, the jackal, the fox, the badger, the stone marten and the western polecat. The occurrence of the wolf in the area is insignificant, while the jackal and the fox are widely distributed species. The badger and the western polecat

are also widely but unevenly distributed. The stone marten inhabits territories close to settlements.

Of the birds, subjects of hunting are the partridge (inhabiting the forest periphery and other open areas), the woodcock, broad-billed sandpiper, wood pigeon, turtle dove, collared dove and stock dove. The Hunting Act also permits the hunting of certain species of geese and ducks, including: teal, marbled duck, white-fronted goose, mallard, widgeon and spoonbill.

While the collared dove and the turtle dove occur widely throughout the region, the wood pigeon and the stock dove predominate in the median age and the old growth forests.

Stray dogs are common in the project area, occurring predominantly in the vicinity of settlements.

In the project area, driving-hunting is the preferred practice. The implementation of the measures prescribed by the hunting management projects is obstructed by financial constraints.

Recreational fishermen seek trout, carp, weather-fish and gobies. All studies of the fish stock in the Strandja river during recent years show a critical decrease in populations, and the disappearance of some fish species.

The health of game is good. Since 1985 no epizootic situation has been registered in the region.

The State Game-Breeding Station (SGBS) at Gramatikovo (within the Strandja Nature Park) was established in 2002. It has a total game-breeding territory of 27.840 ha. The SGBS was established to ensure healthy game populations of optimal density, as well as to improve the conditions for international hunting, monitoring, selection and general transition to selective hunting as a main method for using large game.

3.3.4 Possible Activities under CBC-Measure 2.2

The coordinated management of the forests in the Strandja / Istranca region is an important cornerstone of this project. The common landscape, the same forest types, and even a similar forest management system, are good reasons to improve the cooperation that already exists between the local and regional forest administrations on both sides of the border.

Any plans for sustainable development of the project region must recognise forestry as a key sector. All projects and activities arising from the CBC Programme must be in harmony with the following objectives:

- Conservation of forests for both their economic value ("production function") and their environmental significance ("protection function").–. The latter is especially important for the long term maintenance of: the productive efficiency of the ecosystem, climate stability, quality water resources, atmospheric filtration, soil fertility, and scenic beauty. Forests are also important sites for outdoor recreation and education ("recreation function"). Where required forests are to be expanded and they must be managed in a sustainable manner.
- Advancement of the forestry sector.
- Balancing the interests of society with the vested interests of forest owners.

Since the ability to protect forests is closely linked to the social and economic health of the communities living in those forests, the responsible authorities must provide opportunities for forest villagers to improve their social and economic conditions. Possible projects under the CBC programme include the completion of the Forest Management Plan for the Municipality of Malko Turnovo, and a joint Forest Function Plan to map the priorities of forest stands for various objectives. Also, the harmonisation of existing and future forest management activities is a crucial

element of a common and sustainable cross-border cooperation. This harmonisation can be best achieved by starting at a high level, e.g., with the draft of a common forest strategy for the Strandja / Istranca mountains. The preconditions to achieve this goal are already in place since both national forest administrations are using a similar forest planning system – one which is partly based on the German forest planning procedure.

At the round table meeting in Kirklareli (see Annex 5.6), several project ideas for the CBC programme were discussed – projects that would be eligible under the planned Grant Scheme (see Turkish project fiches 2005/06). These included: scientific studies to research flora and fauna in the region; research on the new oak disease; and programs to protect the forest against biotic and abiotic damages including public participation activities.

In addition to these proposals, the Bulgarian project fiche (see Annex 5.3) also foresees the completion of a Forest Management Plan for the Municipality of Malko Turnovo which owns some 9000 ha of forests.

3.4 BIODIVERSITY, NATURE CONSERVATION AND LANDSCAPE AESTHETICS

3.4.1 Current Situation

The location of the Strandja Mountain range, near the partition of Europe and Asia, along the state border between Bulgaria and Turkey, and bordering the Black Sea to the east, makes it unique in terms of biodiversity and exceptional for European natural heritage. The range forms an integral entity, covered with forests, and including a partially undisturbed coastal belt.

On the European scale, Strandja is the only region representative of the sub-biome “temperate broad-leaved deciduous forests with evergreen underbrush of laurel cherry”, and containing habitats of the south Euxinian and sub-Euxinian types. It is one of the few sites in Europe where an intact river network is still preserved.

The vascular flora, the nesting birds and the diversity of reptiles in Strandja are of European importance. Its mammals, invertebrates and forest habitats of Tertiary vegetation are of global importance.

The conservation importance of the Strandja ranks it as the most important in Bulgaria in terms of the diversity of habitats and vertebrate fauna, and defines it as the most important in the country for 19 species of vertebrates.

All this gives Strandja the status of one of the five territories in Europe that are a priority for conservation.

3.4.2 Nature Conservation

Recognising the conservation importance of the area, Bulgaria established the Strandja Nature Park in 1995. The park covers the watersheds of the Veleka and Rezovska rivers within the Bulgarian section of the Strandja mountains, and is the largest protected area in the country (116.068,5 ha), which includes 5 nature reserves (5.388,7 ha), 11 protected sites (5.169,4 ha) and 17 nature landmarks (51,9 ha).

In proximity to the boundaries of the Park are located: the Belya Kamuk Protected Site, created to preserve rare and protected birds; the Staryat Kesten Nature Monument (Varovnik); the Oak Nature Monument, protecting Strandja oak (Indje Voevoda); the Vekoven Yasen Nature

Monument (Fazanovo); and the Popovi Rocks Nature Monument (Velika). These – together with the areas that have been declared cultural monuments – have increased the conservation significance of the region.

In direct proximity to the boundaries of the Park is the buffer zone of the Tisovitsa Reserve, as well as the territory of the Golyamo Bukovo Monastery and its surrounding region. The monastery is a cultural monument of local importance. It is well known for the curative properties of its spring waters, and for the well preserved forests of characteristic Pontic-Euxinian flora and fauna, typical of Strandja. The territory borders the Park directly to the east and includes lands of the State Forested Area of the SFS Sredets, as well as agricultural lands around the villages Varovnik and Kirovo with a total area of 539,5 ha. Because of its conservation value and proximity to the Park, a proposal was made for its inclusion in Strandja NP. The was rejected by MoEW as inexpedient. A better option would be to declare it an individual protected site, ensuring the preservation of its valuable natural and anthropogenic components.

The special purpose forests in the water supply zone of the Yasna Polyana Dam act as a natural buffer for the Park. The same status should be given to the forests in the five-kilometer coastal strips of the Tsarevo Municipality. These fall into the second protection zone, according to the 1998 Territorial Management Plan of the Municipality, in accordance with Regulation 2 of the Rules and Norms for territorial management planning of the Black Sea coastline. Because the two territorial planning documents were prepared at different times, this was not reflected in the Tsarevo Local Forestry Management Plan, and no changes were made to the status of the forests.

According to the same regulation and planning document, the marine areas adjacent to the Park are included in first protection zone with special use status. Because of the lack of waste water treatment plants, polluted household water is still released into the sea. The regulations prescribed by the Territorial Management Plan concerning water use, biodiversity conservation and submarine archaeology are not implemented and enforced.

In the Turkish part of the mountains, two small protected territories have been declared as nature reserves, one in the region of Igneada (1.345 ha) and the other in the region of Kasatura (329 ha).

3.4.3 Landscape Aesthetics

The project region is characterised by a variety of unique landscapes, such as the Black Sea coast and the low (in Bulgaria) and high (in Turkey) elevation ridges of the Strandja / Istranca mountain range.

The Black Sea coastline is characterised by little bays, rocky cliffs, firths and sunken river estuaries. The natural vegetation in this zone is influenced by the sea breezes, the wet air currents, the contact with and the influence of the sea water, as well as by the varying water regime of the rivers. The coastal forests, periodically flooded and known as *Longos* – are a special feature.

The Turkish coast is magnificent, with long stretches of beaches (including a kilometre long beach up to the Bulgarian border) and beach coves in bays and at river outlets (Kasatura). In other parts, the coast is very steep with the forest growing right to the edge of the coastal cliffs. A part of the area is limestone and a number of caves are found near the coast.

The Bulgaria Strandja region is characterised by expansive low-elevation and medium high hills which give way to the steep hillsides of the river valleys. The dividing range with the highest

peaks in the area is located on the Turkish side of the project region. The high elevation areas are covered with extensive broadleaf forests and offer a magnificent view to the lower areas in the south.

The aesthetic qualities of the regional landscape are determined to a large extent by the successive rows of gentle mountain ridges covered by oak and beech forests, and by the colourful meadows with their wide variety of plant species. Further contributing to the uniqueness of the landscape are features such as: the sunken estuaries of the rivers flowing into the Black sea (including the Veleka and Silistar); the rocky cliffs of the coastline; the beeches and dunes with their characteristic vegetation; and the river gorges and karst forms.

Other strong aesthetic influences include: the pastoral landscapes of the Veleka River valley around Brodilovo and Kosti; the agricultural landscapes in the north-western section of the project region; and the Istranca lowlands where the arable lands give way to vast pastures.

The aesthetic qualities of the landscape in the project region are strongly influenced by the seasonal change of colours. The fresh green colour of the forests, the wealth of colours in the blossoming meadows, the homogenous purple massifs of the rhododendron in spring, and the warm pattern of yellow, orange, red and brick of the forest massifs in autumn are all equally impressive.

The mountain crests in the northern part of the region offer commanding views, while in the valleys below, more intimate aspects of the landscape dominate with Strandjan floral diversity and geological phenomena capturing the eye.

3.5 TOURISM AND RECREATIONAL ACTIVITIES

3.5.1 Background

Tourism to / in Bulgaria should be analysed as two different components, i.e. domestic tourism and international tourism having somewhat different profiles and being dependent on slightly different product mixes.

Western European languages such as English, German and French are mainly spoken only by Bulgarians at major seaside resorts and up-market Sofia Hotels. Written Bulgarian is a major obstacle to informed free individual travel (FIT) by western tourists in Bulgaria. The second language in Bulgaria – prior to its independence from the Soviet block – was Russian.

Naturally, domestic Bulgarian travellers are not hampered by language constraints, and can therefore more easily seek rural family or small hotel/guesthouse accommodation at less developed nature and culture destinations.

Also, Russians and Ukrainians form a significant segment of the visitors to the Bulgarian Black Sea coast, so far they have shown little interest in culture or ecotourism.

To foreign visitors, Turkey poses similar language constraints. Western languages are spoken at major seaside resorts and at main city hotels (Istanbul, Ankara). However, the majority of Turks do not speak a second language. In both Bulgaria and Turkey, western language skills are fast improving through school education.

As a border area Strandja / Istranca forms a transition zone where a (limited) number of people speak the neighbouring language. That is, some Bulgarians speak Turkish as a second (or first) language, and vice versa. More importantly, both sides of the border have a common history

dating back to the Ottoman Empire, and population migrations have occurred even into the 20th Century. Today, descendants of original Turkish/Bulgarian inhabitants often return to visit their former family home tracts.

3.5.2 Ecotourism

The word *ecotourism* was first defined by the World Bank, although subsequent definitions have varied widely. In brief, ecotourism is sustainable, nature-oriented tourism, which does no harm to the environment. The definition has since been expanded also to address respect for local culture, and income generation for local populations, notably through small and medium enterprises (SMEs).

A definition adopted in 2002 by several Bulgarian ministries (Economy and Tourism, Environment and Water, Agriculture and Forests) as part of a protocol (*Ecotourism, Mountains and Protected Areas – Partners in Prosperity*) could well be adopted for the present report:

"*..Ecotourism is travel to relatively undamaged natural areas, aimed at providing visitors with opportunities to view and enjoy nature and all accompanying cultural attractions, while at the same time encouraging their preservation and only allowing the lowest possible impact. Ecotourism is a form of small and medium enterprise development opportunity for developing businesses related to all affiliated services, mainly through small local enterprises, which ensures the social and economic vitality of the local population, and a just allocation of responsibilities and benefits. Ecotourism comprises important elements of nature protection, conservation education, interpretation of natural and cultural heritage, and it complies with all forms of sustainable tourism*."

In this context it should be emphasised that ecotourism is part of tourism in general, and accordingly should be sustainable, viable and profit generating in pure economic terms. Ecotourism can only rarely exist as an exclusive product. In general, it will we part of a broader product mix and destination profile.

The characteristics of ecotourism can be described as follows:

- It contributes to biodiversity conservation;
- It contributes in economic terms to the conservation of nature and the protection of cultural assets;
- It creates income for local residents, as well as the expansion of social services;
- It promotes awareness of the value of nature and culture to local residents, as well as to domestic and international visitors;
- It highlights the conservation value of specific areas;
- It promotes responsible tourism, both on the part of visitors, and within the tourism industry in general;
- It promotes only the consumption of renewable resources;
- Primary target groups in the service industry are local residents and SMEs;
- It emphasises local participation, and acceptance of new product developments and diverse visitor profiles; It includes an interpretative and educational visitor component.

All tourism initiatives for the mountain forest, as well as for the coast, should be planned so as to ensure that environmental impact is minimal and that no sensitive biota or species are threatened. It is important to note that *environmental impact from tourism is not a function of the number of tourists, but a function of the activities out of those tourists*, as well as the activities of

local people involved with the tourist trade. Accordingly, the "carrying capacity" of a tourist region must *always* take into account the type of activities in which people engage.

Visual pollution, noise pollution and hunting should also form important parameters in an assessment of visitor impact.

3.5.3 The Project Area as a Tourism Destination

The Strandja / Istranca Mountains form a continuous stretch of undulating forest land across the Turkish-Bulgarian border and to the Black Sea. The mountains lack the spectacular peaks and gorges of major mountain destinations in both Bulgaria and Turkey, even though the sides of creeks are often quite steep. High points in the mountains give good overviews of the forest interspaced with small agricultural patches and grazing areas.

Although the mountain-forest would not be termed "spectacular" *per se,* this is to a large degree compensated for by the uniqueness and great species variety of the region. Bird watching, however, is easier along the coast and to the north of Strandja, as the forest does not make it easy to view birds. The seasonal changes in flora make the region attractive throughout the year. Species include Strandja periwinkle, March snowdrop, orchids, glossy tulip, Autumn crocus and, at times, a dense undergrowth of Rhododendron pontica.

Wild forest mammals are shy, and not easily seen or photographed by the average tourist as the forest has been, and still is, a major location for both legal and illegal hunting. Hunters presently form a significant segment of overnight visitors to the forest. Hunting also dominates local perceptions of the forest. In the eyes of many locals, hunting is the primary recreational activity.

In comparison with other mountain and eco destinations in Turkey and Bulgaria, Strandja / Istranca may seem to be rather "bland". For this reason, a number of specific developments in the areas of visitor facilitation, seasonal tour operations and seasonal marketing, will be necessary.

3.5.4 Location of Strandja / Istranca as related to major visitor generating areas

Bulgarian Strandja is well situated as a nearby excursion area for visitors to the Black Sea coast. It is also within easy distance from the city of Bourgas. At least 4 million visitors come to the Bulgarian Black Sea coast during the season stretching from mid-April to mid-October. Approximately 70% of all Bulgarian visitor accommodation is along the coast (20% is in ski/mountain resorts and 10% is in urban areas). Visitors are both domestic and international, international visitors being predominantly German, British, French and Scandinavian. During the shoulder periods (April to the end of May, and mid-September through October), a large segment of visitors are elderly retired couples and single visitors. During the main season, family tourists dominate (80% of visitors).

During the winter season the area attracts few tourists, and roads may be difficult or closed due to snow. As a skiing location the area has almost no value. Nearly all hotels, guesthouses and resorts along the coast are closed during the full length of the winter season.

During the tourist season, a number of travel agencies and large hotels organise day excursions to the forest. The village of Brushlian alone received 7.000 day visitors in 2004. The forest area now has some 120 beds for overnight visitors, about half of these in family guesthouses.

Roads along the Bulgarian coast are in fair to good condition, except the southernmost stretch, soon to be upgraded. The main road through Malko Turnovo to the Bulgarian-Turkish border is also in good condition. The condition of forest roads is highly variable, ranging from poor to good.

The Turkish Istranca coast is less developed, with tourist developments mainly taking place in the fishing village of Kiyiköy, to a minor degree at the estuary of Kasatura, and in the town and along coast of Igneada / Limanköy up to the village of Beendik, close to the Bulgarian border. Developments on the northern beach is limited due to the presence of a military camp (photography is presently not allowed).

Both Kiyiköy and Limanköy are located only 3 hours drive from Istanbul, a city with approximately 10 million inhabitants. Road connections are good, and intensive tourism developments are expected in and around the two settlements during the coming years.

Inland forest areas are easily accessible from the city of Kirklareli, and forest roads are in moderate to good condition. Hunting and picnicking by self organised groups seem to be the main visitor activities. No hotel- or travel agent-organised group tours to the area are currently taking place, and no tourism development plan exists for the area.

The peripheral location of Strandja / Istranca – in contrast to more developed tourist destinations – is borne out by the Lonely Planet Guides to Turkey (March 2003) and Bulgaria (June 2002). In the *Lonely Planet Guide: Turkey*, the Istranca area (including the coast) is not even mentioned, while the Bulgaria guide states that: *"…the Park is not – and probably never will be – set up for major tourism, if only because it's so remote and visiting is not easy without private transport*…". However the Guide also notes that: "*The park is ideal for hiking, because it is sparsely populated (sic) and relatively flat*."

A coastal border crossing at the Bulgarian village of Rezovo, planned for 2006 and allowing cross-border visiting between Turkey and Bulgaria, could possibly mitigate such extreme "remoteness" by allowing day excursion – notably to Turkey by tourists on the more developed Bulgarian coast. Presently, only a walking bridge crossing the Rezovska/Rezve River is planned, for use during summer only. A full road bridge would enable tour circuits to include both the Bulgarian-Turkish coast and the Strandja / Istranca Mountains.

In the event that a full cross-border road connection is established, great care should be taken to plan for sustainable development of the relatively undeveloped southern Bulgarian coast and the spectacular *forested* Turkish coast.

Land use conflicts predominantly occur in coastal areas where construction activities for tourism development seem mainly uncoordinated and lacking in overall planning. New constructions of dense tourist villages and summer houses both pose a threat to the environment through the occupation of biologically sensitive areas and "visual pollution" of spectacular coastal stretches.

The construction of new summer houses, and the transformation of old buildings into summer houses within the forest areas will, over time, alter the composition of villages. With significant out-migration from the forest, it is a matter of opinion if the growth of summer housing can be seen as a conflict or threat, as the presence of summer housing at least keeps villages alive during spring, summer and fall.

3.5.5 Economic potential as a protected and well managed ecotourism destination

An important initial prerequisite for transboundary ecotourism development is not to exaggerate the tourism/economic potential and thus create false expectations among the population of forest villages.

The Turkish coast, with its steep cliffs and undisturbed coastal forest, probably has significant potential for ecotourism. Here, a trail system developed for walking and cycling only (possibly in combination with horse trails) would have an excellent future, especially if combined with a few wooden stairways down the cliffs from the forest to the sea. In the construction of such stairways, care should be taken not to disturb bird rookeries and flora. Caving near the coast could also have some limited potential, where care should be taken to close such caves to visitors during winter bat hibernation.

Forest village homestay tourism has considerable domestic potential, notably in Bulgaria where some villages still contain a number of traditional buildings, and homestay / bed & breakfast facilities have not been developed to their full potential.

A main initiative for the transboundary area should be the design and creation of a grid trail system for walking, hiking, cycling and horse riding. The trails should pass through a variety of forest environments, exposable archaeological sites and through villages, but should avoid reserves. A number of trails should meet at the Kirklareli/Dereköy – Malko Turnovo border crossing, and then divide on both sides of the border. In sensitive botanical areas, paths/trails should be constructed as boardwalks with rails.

A consistent system of trail signage should be agreed to, and used on both sides of the border with texts in Bulgarian, Turkish and English. Infrastructural components such as refuse bins, fireplaces, parking lots, toilets and camping grounds could retain a local character, indicating whether the visitor is in Turkey or Bulgaria. However, signage should still be in Bulgarian, Turkish and English – the country language first, followed by the neighbouring language and then English.

The economic potential of well managed ecotourism will lie in facilitation of homestays, guided nature tours, and by restaurants and shops selling local foods, agricultural produce and to a lesser degree handicrafts. While such activities should be supported by the project, they will predominantly be dependent on local group or individual initiatives. However, forest product development can form the basis for attracting domestic and international ecotourism visitors. A range of possible initiatives are listed below:

1. Quality control of local agricultural produce such as honey, dried sausages, etc., with friendly and picturesque eco-labelling. Sales from community shops near visiting points.
2. A standard brochure and website covering family-house / bed & breakfast accommodation, local restaurants and shops, with seasonal price ranges for family accommodation.
3. A classification of visitor sites, for example, by location, category of interest (e.g., historical, cultural, ecological…), possibility of exposure, and so on. It should be noted that most historical / archaeological sites in the area are small and unspectacular to the non-specialist visitor. Such cultural sites therefore need a “story” that may be of interest to visitors. Trails should pass by a number of such locations. Each site should have an explanatory board.
4. Workshops and short training sessions should be given by professionals from the hospitality trade on topics such as: room furnishings, bathrooms, food & beverages, visitor services, training of nature and culture guides, meeting & greeting,

sales/packaging/labelling, marketing & promotion. Training in how to establish linkages to tour operators, coastal hotels, and other good sources of tourists is also very important.

5. The construction of facilities to attract group and family visitors. These could include small museums along roads and walking trails – open for the summer, with minimal entrance fees, and offering postcards, T-shirts, hats, etc. for sale.
6. The construction of "watch towers" overlooking the forest.
7. The establishment of information centres on the coast, promoting and guiding coastal visitors to the mountains.
8. The possible construction of a canopy walk.
9. As parents with children and the elderly form a significant proportion of coastal visitors, special facilities should be created for these groups, including the handicapped. Examples include: playgrounds for children, built with local materials; children's museums containing animal models that can be touched; and easy walks for the elderly, handicapped (boardwalks) and families with small children.
10. Breeding station "zoos" with local breeds – Grey cattle/plevna, Strandja sheep, East Balkan pigs, etc. – where the animals can be watched and touched.
11. Caving as an activity for more active visitors. Bulgarian Strandja contains 78 known caves. It is deemed that two of these could be opened to visitors for guided tours (except during the bat hibernation season). The Turkish *Dupnisa* cave (depth: 2.720 m) in the Demirköy/Sarpdere area has already been opened to visitors. Three additional caves are found in the Vize area: Yenisu (1.620 m), Domuzdere (300 m) and Kiyiköy (305 m).

3.5.6 Ecotourism and seasonality

Strandja / Istranca has no potential to develop into a major bird watching destination as birds are more easily watched in the wetlands north of the Strandja forest. In fact, the forest actually hides birds from the ordinary visitor; only the niche market of specialist ornithologists can be expected to visit the forest for bird watching. Also, due to hunting, larger wildlife is shy and will not be seen by the average visitor.

For most eco-destination visitors, it is of central importance to provide *guaranteed sightings*, nature that will be available for everyone to see. Here the strength of the Strandja / Istranca mountain forest will primarily lie in its botany. An emphasis on "*small nature*", notably insects, is also possible. The giant oak beetle (Lucanus cervus) could become an *icon*, possibly along with a species of butterfly (a Papilionid). If low power river boating is allowed on the Veleka River, the kingfisher could also function as an icon.

Botanical icons will have to be organised by flowering season, i.e., visitors will need to know when they need to visit to see one or more specific flowering plants. Medicinal plants (with a story to tell) include: Cyclamen coum (February-April), snow drops, Anemone punica (May-April), Daphne pontica, Hypericon calycinum, Cistus salvifolius, Vaccinum arctostaphylos, Primula vulgaris subsp. Sibthorpii, the Strandja periwinkle (May), the yellow water lily (June-September) and the Rhododendron ponticum (April-June). The Rhododendron already has icon status. The forest also contains 17 species of Orchis of which a number could be given special ecotourism status.

A list should be compiled by a competent botanist, and only non-sensitive areas should be opened to the public. Each plant should have a "story" to go with it, e.g., endemic, tertiary relict, rare (red-listed…), medical value, poisonous, parasitic, religious/mythological importance… and various combinations of the preceding.

For fall, the *autumn colours* of the forest and the flowering of Autumn Crocus should be promoted as the main attractions and photo opportunities. Mushroom excursions are another possibility, where smaller areas could perhaps be closed to mushroom pickers with the agreement of the local community.

3.5.7 Marketing and promotion

Marketing and promotion should focus on Strandja / Istranca as a gentle place where one can walk with ease. Primary target groups should include families with children, lazy beach visitors, the elderly and young couples.

Yearly events such as the fire dancing in Bulgari Village (June 3rd) should be highlighted as seasonal opportunities.

Brochures and/or booklets should change with the season, emphasising Strandja / Istranca "just now" as a unique visitation opportunity. The text should be tri-lingual. Materials in German could also be considered. *The Seasons of Strandja / Istranca,* along with a calendar, should be produced as part of the trans-border cooperation.

Special features of the cooperative, cross-boundary ecotourism initiative could include: a yearly Turkish-Bulgarian forest flower festival , and a joint postage stamp issue: *Seasons of the Strandja / Istranca.*

3.5.8 SWOT Analysis Table

Sector	Strengths	Weaknesses	Opportunities	Threats
Location / Accessibility from major visitor generating areas	General A bridge across the Rezovska/ Rezve River forming the coastal border between Turkey and Bulgaria could easily be constructed. Turkey The Istranca area is located within easy reach by road from Istanbul and Edirne. Only 3 hours by road from Istanbul with 9 million inhabitants gives major visitor generating possibility. Bulgaria Strandja is within easy reach of the city of Bourgas, the town of Sozopol and of major tourism centres along the Black Sea coast.	General Turkish military installation close to border on coast. Turkey Visitors from major cities and towns will mainly head for the coast for recreational purposes. However, beach areas are also available and developed along the eastern Black Sea cost and Sea of Marmara. Bulgaria Distant from larger domestic visitor generating points, i.e. major Bulgarian cities.	Turkey Due to closeness to Istanbul and Edirne the coastal forest and cliffs could develop into a significant ecotourism attraction. Bulgaria The huge number of both domestic and international visitors to the Black Sea coast gives excellent opportunities for increasing excursion- and overnight ecotourism to the forest and mountains.	Turkey Uncontrolled developments of tourist facilities and the possible construction of car roads in coastal forests. Bulgaria Day excursions to forest will give only minimal income to local villagers.
Status as protected area	Turkey Most forest is state property. Bulgaria Network of protected territories including large nature park.	Turkey No status as protected area. Bulgaria Park management plan in draft, not yet approved. Further protection needed. No plan for coastal tourism development.	General Status as protected area will give impetus to ecotourism and enhance the touristic value of the Strandja / Istranca forest, mountains and villages.	General Lack of enforcement of regulations; lack of coastal development and management plans; lack of a joint forest management plan.

Accommodation/ Construction	Turkey No positive developments. Quality of existing tourist accommodation needs further investigation. Bulgaria Some upgrading of village houses taking place as tourist home accommodation notably in Brushlian and Gramatikovo. Traditional houses in forest villages have protected status. Coastal tourist accommodation attracts numerous foreign and domestic visitors.	Turkey Forest villages being depopulated, dilapidated houses. Little economic activity. New hotels and summer houses being built along coast, with little respect for environment and scenery. Rehabilitation of traditional houses hampered due to complex regulations. Bulgaria Villages in forest being depopulated, inhabitants mainly old persons. Many summer houses being built in villages by outsiders. Unregulated coastal developments threatening environment and destroying scenic value. Slums form outskirts to towns.	Turkey Some limited possibilities for upgrading traditional forest houses for visitor accommodation. Excellent, but not utilized opportunities for conservation and use of traditional coastal houses, notably in Kiyiköy. Control of coastal developments; enforcement of coastal legislation and building restrictions for new constructions. Bulgaria Continuing planned preservation of traditional buildings in forest villages. Control of coastal developments; enforcement of coastal legislation and building restrictions.	Turkey Continuation of unregulated construction activities. Lack of compliance with coastal legislation. Bulgaria Forest area becomes dominated by summer housing belonging to outsiders.

Infrastructure	Turkey Roads and forest roads mainly maintained. Bulgaria Roads and forest roads mainly reasonably maintained.	Turkey Erratic disposal of solid waste in forest and forest villages. Sewage and wastewater led directly to sea, lakes and rivers. Lack of designated and designed parking and picnic areas with water supply, fixed secure camp fire facilities, toilets and garbage disposal bins. Lack of removal of solid waste. Bulgaria Last stretch of costal road to Turkish border in very poor condition. Lack of designated and designed parking and picnic areas with water supply, fixed secure camp fire facilities, toilets and sound garbage disposal bins. Lack of removal of solid waste. Wastewater often led directly to sea.	General Establishment of a joint network of walking and hiking trails. Establishment of parking areas, waste disposal systems and systems for the safe disposal of waste water.	General Lack of common agreement on trail network. Lack of developments securing safe and environment friendly waste disposal. Lack of planning for infrastructural developments.

Value as nature attraction	General Rich and varied forest and coastal nature. Forest environment to a large extent underutilised except for hunting. Coastal areas, and rivers of major attraction value. The seasonality of forest botany (including autumn colours) is probably the main potential ecotourism attraction. Turkey Coastal areas are very spectacular, with forest continuing right up to the edge of high coastal cliffs, interspaced with quality beaches. Coastal forests with great species variety, wetlands and alluvial forests. Closeness to Istanbul gives major visitor generating possibility for ecotourism visitors. Bulgaria Forest developed to a degree. Woodland interspaced with grazing/foraging areas for sheep, goats and a local breed of pig, giving landscape variation. Coast not heavily forested giving forest great attraction value as excursion destination from coastal tourism areas, as well as seasonal forest overnight visitor stays.	General Due to the proximity of the Black Sea coast the Forest area may mainly be used for day-excursions creating little revenue from tourism. Turkey Forest area in interior is out-of-the-way from coast, and may not form a major visiting area even during seasons when forest is most spectacular. Poaching probably a problem. Some areas severely eroded through over grazing. Coastal area under threat from touristic developments reducing the scenic value of the coast. Wetlands are threatened by the release of untreated waste water. Bulgaria Coastal areas severely threatened by unplanned touristic developments. Threats both to biodiversity and scenic attractiveness. Tourism sun, sand and sea oriented, presently with only little focus on nature. Garbage and waste water disposal problematic. Poaching in forest cited as a problem.	General The highlighting of specific aspects of Strandja / Istranca nature which can compete with more established, spectacular and dominant ecotourism attraction areas. The uniqueness of the forest in a European and World context. Highlighting specific species and biota as by season. Highlight local domestic breeds. Emphasis on the conservation measures which preserve the area.	General Conservation measures will not be carried through and enforcement will be lax. Hunting will continue as the dominant forest visitor and local activity, interfering with ecotourism. Depiction of forest will be too broad or too detailed (quite possibly both) to attract and be visualised by general interest visitors.

Present value as cultural attraction	Turkey Possibility for rehabilitation of some villages in especially attractive areas. Archaeological sites could be developed to some extent. Bulgaria Archaeological attractions can be incorporated as part of tour circuits of forest. Cultural events being staged for visitors to Breshlian, fire dancing ceremony in June in village of Bulgari.	Turkey Cultural attractions seem somewhat insignificant compared with the wealth of cultural attractions found in Turkey. Bulgaria Archaeological attractions can not compete with attractions found along the coast to the north. Capacity for cultural events is limited due to depopulation of area.	General Rehabilitation of traditional houses for use as visitor accommodation, restaurants, shops etc. Highlighting a few specific archaeological sites/monuments near to villages and trails, and protecting such sites /monuments. Design of, or revival of traditions/cultural events.	General Uncontrolled construction of new buildings, old buildings demolished or left to deteriorate. To many archaeological sites exposed. Limited or no protection of archaeological sites. Cultural events not professionally organised.
Product development options	General The different seasons in the forest will be a very strong point in planning tour circuits and in marketing and promotion, giving the visitor the impression that any specific time of the year (excluding the winter) is the best time to visit Strandja / Istranca.	General Competition with more established and more spectacular destinations in Turkey and Bulgaria.	General Providing environmentally sound activity facilities with a nature component, such as: Playgrounds for children. Paths for the elderly, handicapped and families with small children. Small museums. Watch towers. Information centres. Canopy walks. Preservation of traditional village buildings. Signage.	General Lack of upkeep of facilities. Lack of local interest and involvement in product development.

Linkages to hotels and tour operators	Turkey Some linkages to Black Sea Coast. Bulgaria Linkages to major hotels and tour operators for village visits, notably to Breshlian Village.	Turkey No linkages to forest north of Kirklareli and non-coastal border area. Bulgaria Full potential of combining culture and nature experiences not realised.	General Design of *seasonal* tour programmes, in close collaboration with hotels and tour operators.	General Lack of professionalism in designing tour programmes. Such programming should combine the knowledge of tourism sector specialists and biologists (notably botanists) and cultural expertise.
SME development	Turkey Trail development in the coastal forests and upgrading of traditional houses may bring in more visitors and increase lengths of stay, thereby creating more business opportunities on the coast. Inland tourism business development options are minimal. Bulgaria Sales points should be developed at stops on forest tour routes for sales of local organic agricultural products, honey, textiles, postcards. Some local crafts should be revived, but the wool of the Strandja sheep is not of good quality. Cultural activities and events should be increased.	Turkey Depopulation of main forest area and loss of traditions. Bulgaria Depopulation of forest area and loss of traditions. Few young people to act as trail- and nature guides.	Turkey Creation of network of coastal forest trails and wooden staircases down coastal cliffs, establishment of Kiyiköy as cultural village, while there is still time. Bulgaria Standardisation in labelling and presentation of local agricultural products. Local simple textile production including printing of T-shirts and hats.	Turkey Unregulated developments destroying the ambience of Kiyiköy and possible construction of motor roads in the coastal forest. Bulgaria Age of population; lack of initiatives.
Cross border options / accessibility	The opening of a coastal border crossing is of paramount importance, both to allow “exploration” of coast by visitors from both sides and to make tour circuits possible through a larger area of the Strandja / Istranca forest and coast.	Roads near coastal border in need of upgrading on both sides of border.	Tour circuits covering both Bulgaria and Turkey	Coastal border post only opened as a walking bridge not as a vehicle crossing.

Cross border cooperation	Initial cross border cooperation should be on joint marketing and promotion targeting both domestic and international visitors as well as special interest niche markets. The creation of a joint logo and slogan/catch phrase for Strandja / Istranca.	Strandja / Istranca may be difficult to profile in competition with more spectacular and established destinations in Turkey and Bulgaria.	The attractiveness of a joint visit to both Turkey and Bulgaria.	Disagreements on product profiling.

3.5.9 Similarities and Differences between Turkey and Bulgaria

To develop a viable tourism product for Strandja / Istranca it is important to bear in mind that the main attraction for the vast majority of both domestic and international visitors is the Black Sea coast. Accordingly, a strategically sound tourism development plan should place the Strandja / Istranca as a secondary destination, as an add-on to the beaches and coastal experience. This strategy could in time, with necessary developments, establish the forest, or parts of the forest, as a primary destination once a network of trails has been laid out and specific seasonal and site attractions have been defined and marketed.

For Bulgaria, the main developments pertaining to tourism should be:

- The establishment of an integrated trail system within the main forest, linking the area to Turkey through the Malko Turnovo / Kirklareli border post.
- The facilitation of family visits and visits by the elderly (through children's play facilities, small museums, easy walking trails for families with small children and for elderly or handicapped people).
- The establishment of built attractions such as an information centre, watch towers, boardwalks with rails through interesting botanical areas, and possibly a canopy walk.
- The marketing of seasonality, notably specific and interesting flowers and insects by season.

For Turkey, main initial developments should centre on the protection of the coastal forest and cliffs, and on the development of a coastal forest trail system for walking and cycling only, including staircases leading down the coastal cliffs to the sea.

Turkey and Bulgaria differ significantly in options for tourism development in a number of ways:

- In Turkey, the Istranca forest fills the area between coastal settlements presently being developed for tourism. Visitors will accordingly have little incentive to visit forest areas far from the coast.
- In Bulgaria, the main forest is attractive to both domestic and international visitors due to the presence of traditional villages deep in the forest. Visitors can thus combine culture and nature tourism. In contrast to the Turkish Istranca coast, the coastal forest in Bulgaria is rather unimpressive due to the gently undulating coastal plains without spectacular coastal cliffs. In Turkey, the steep coastal cliffs interspaced with small beaches are a major visual attraction and photo opportunity.

For the above reasons, the Bulgarian and Turkish Strandja / Istranca products will *complement* each other rather than compete.

3.5.10 Possible Activities under CBC-Measure 2.2

The ecotourism plans currently developed for the area are primarily listings of potential attractions and programmes for tourism-related workshops and training. The Strandja Nature Park Management Plan, however, does integrate tourism development as part of general park management, and should be used for ecotourism development purposes as soon as, and if, the Management Plan is approved.

No international cross-border tourism or ecotourism plans exist at present, but the national plans discussed below are of importance.

Existing Plans in Bulgaria

Strandja Nature Park Management Plan (Draft), Bulgarian Biodiversity Foundation study (1994-2003). This was formerly the Bulgarian-Swiss Biodiversity Conservation Programme, 2004.

National Ecotourism Strategy and Action Plan for Bulgaria, Sofia 2004. Supported by USAID, Bulgaria Mission, under Biodiversity Conservation & Economic Growth Projects I and II.

Strandja, Black Sea Coast and Eastern Thrace Ecotourism Destination. Action Plan for Ecotourism Destination. Bourgas 2004. Coordinated by Bourgas Regional Tourism Association. Coordinator: Sonia Enilova, consultant: Ventsislav Panchev. Supported by USAID, Biodiversity Conservation & Economic Growth Project II.

Existing plans in Turkey

The Kirklareli Tourism Inventory and Development Plan, Kirklareli ili Turizm Envanteri ve Turizmi Gelistirme Plani, Kirklareli Valigi, 1994. Suggesting the development of beach tourism along the coast, and alternative nature-oriented tourism developments in the central northern forest.

The GEF II: Biodiversity and Natural Resource Management Project, Igneada. This has been instrumental in the construction of boardwalks in sensitive longos (alluvial forests), as well as in initiating a small women's handicraft project

Tentative List of Tourism Projects

The following list is to assist the development of plans and activities for ecotourism in the region, and may be helpful to define eligible projects for the Grant Scheme foreseen in the 2006 Turkish project fiche. The estimated costs are not based on a detailed calculation, but are meant to roughly categorise the investment.

- Establishment of a cross border trail network meandering through villages and passing by interesting and exposable botanical and archaeological locations/sights of interest. Trails should be designed in different "grades" for hiking, cycling and for use by the less athletic and families with small children. The network should include trail signage, information boards, benches, picnic tables, refuse bins, safe fireplaces, boardwalks, etc. (Estimated cost: 120.000 €)
- Establishment of 4 sealed waste disposal dumps where waste collected in the forest can be sorted and kept until removed for destruction (Estimated cost: 4 x 4.000 = 16.000 €).
- Establishment of two visitor centres (one on the Turkish coast, one in the Bulgarian forest) describing the nature and culture of Strandja / Istranca. For use by tourist visitors and excursionists, as well as by schools and other educational institutions (Estimated cost: 400.000 €).
- Establishment of 6 small museums highlighting local culture and nature subjects (Estimated cost: 6 x 25.000 = 150.000 €).
- Workshops and short training sessions for local populations to be given by professionals from the hospitality trade on topics such as: room furnishings, bathrooms, food & beverages, services, training of nature and culture guides, meeting & greeting, sales/packaging/labelling, marketing & promotion, and on how to establish linkages to tour operators and the coastal hotel sector, etc. (Estimated cost: 20 training sessions/workshops 20 x 4.000 = 80.000 €).

- Eco-label design and packaging design for local agricultural produce such as honey, dried herbs, marmalades, dried sausages, etc. Printing of labels (Estimated cost: 10.000 €)
- A standard brochure on family-house / bed & breakfast accommodation, local restaurants and shops, including seasonal price ranges for family accommodation. Design and printing of first issue. (Estimated cost: 5.000 €).
- A classification of sights, for example, by location, possibility of exposure, and points of interest. Most historical/archaeological sites in the area are small and unspectacular to the non-specialist visitor. For this reason, they need a "story" of possible interest to visitors (Estimated cost: 30.000 €).
- The construction of three "watch towers": two in Turkey overlooking the central Istranca and one overlooking the coastal forest and coast; one in Bulgaria at the forest high point (Estimated cost: 150.000 €).
- The establishment of one small information centre on the Bulgarian coast, promoting and guiding coastal visitors to the mountains, possibly part of the Sozopol Museum (Estimated cost: 10.000 €).
- The construction of two canopy walks, one in Turkey, one in Bulgaria (Estimated cost 100.000 €).
- Nature playgrounds for children (Estimated cost: 15.000 €).
- 2 breeding station "zoos" with local breeds: Grey cattle/plevna, Strandja sheep, East Balkan pigs, etc. Animals can be watched and touched. (Estimated cost:: 200.000 €).
- Facilitation of caving (Estimated cost: 7.000 €).
- Establishment of parking lots with water and toilet facilities (Estimated cost: 12.000 €).

4 SCENARIOS FOR POSSIBLE ACTIVITIES AND STRATEGIES

4.1 DISCUSSION OF POSSIBLE SCENARIOS

As the previous chapter has shown, there is a large number of diverse possibilities for small projects throughout the project region. But this is not the intention of the CBC programme which seeks a so-called "umbrella project" – one that can best ensure long term cross-border cooperation.

This chapter describes the outlines of such an umbrella project, based on the land use analysis in Chapter 3. In this section, a variety of concepts and possible activities will be discussed using a SWOT analytical approach (Strength / Weakness / Opportunity / Threats) in order to develop a common strategy for the Istranca / Strandja border region for the CBC programme period 2005/06.

Mirror Activities and Common Standards

The easiest way to initiate cooperation between Turkey and Bulgaria in the field of sustainable development and biodiversity is to come to an agreement on common or identical planning activities in the project region. Such activities must be consistent with the objectives of the CBC program and must be carried out during the 2005 funding period (which is available to both countries). In addition these activities must lead to the same expected results. Moreover, all joint projects require common standards with respect to the methodology used and the systems implemented, (e.g., GIS mapping standards, documentation and monitoring standards).

There are many potential projects in which official authorities and/or private groups are responsible for implementation – on both sides of the border. Unfortunately, it is questionable whether such projects will actually lead to ongoing cross-border cooperation, even though they are eligible under the CBC programme. However, if joint projects are undertaken in both countries, they might generate a certain cross-border effect per se, due to common “mirror” activities needed to carry out and complete the projects.

The **strength** of this strategy is – at first glance – the flexibility to plan several individual projects independently. This will increase the number of project proposals to be submitted for funding under the CBC scheme (see Chapter 3 for potential individual project proposals).

But at the same time, this kind of “freedom” is the **weak** point of such an approach, since without a common and committing strategy (which additionally must predefine the project area), all efforts and activities remain single mosaic stones without a consistent and transboundary effect on biodiversity and the sustainable management of natural resources.

On the other hand, this funding strategy gives the Turkish and Bulgarian project beneficiaries and local authorities the **opportunity** to begin cooperation and improve the relations between the two countries on administrational and political level.

If the cross-border communication process – for some reason – will not start, the project is **threatened** to become a failure, or at least will not result in the envisaged cross-border cooperation. Another risk arises from the fact that there is only one common funding period foreseen in 2005 for both countries. That means that the "mirror activities" must be completed in

an extremely short timeframe to equalise the big differences in the planning status in Turkey and Bulgaria. In Strandja, a Nature Park and potential Natura 2000 sites have already been established. In Istranca, such nature conservation planning activities are taking place only in Igneada within the scope of the GEF project. It is highly questionable if nature conservation standards can be harmonised within one funding period and without a common umbrella project.

Network of Protected Areas

Instead of funding many small projects independently, there is another way to achieve cross-border cooperation in nature conservation. This is the joint establishment of a *network of protected areas* in the Strandja / Istranca region – a network with linkages to the national systems of protected areas in the two countries. Such a project could be based on ongoing European activities such as the mapping of Nature 2000 sites in the scope of the FFH and Birds directive, (Natura 200 sites are already mapped in Bulgaria, in Turkey a Twinning Natura 2000 project started in 2004) and the CORINE land cover database containing information on land use, land cover and biotopes.

Compared to the strategy mentioned earlier, the **strength** of such an approach is that there is already a well-defined methodology and objective that meets European standards. In addition, a trans-national monitoring system could be installed to document the status quo and track the changes within the protected areas.

On the other hand, if the CBC project focuses on nature conservation issues only, the network-building project – although suitable for conservation purposes – will not adequately address the sustainable management of natural resources which also requires plans and strategies for human activities in the region. Although this is a **weak** point of this approach, it also implies the **opportunity** to plan buffer zones around such a network of protected areas, and to develop these adjacent areas in a manner consistent with the national legislation. Again, there will be the **risk** that such national planning activities will not have the desired cross-border effect, and will not be carried out using internationally harmonised standards.

Istranca Nature Park

The most significant difference between the Bulgarian and Turkish project region concern the planning status of the area. As already mentioned in the text, the Strandja Nature Park has been established since 1995. During this period, many activities have been carried out to develop the region and protect its biodiversity. In Turkey, on the other hand, protected areas have only been established within the scope of the GEF project located in Demirköy. In addition to the coastal nature reserves (Longos Forests and Kasatura), a forest reserve adjacent to the Bulgarian Uzunbudjak (Lapushna) nature reserve has been planned. Outside of these local plans to protect individual areas, there are no strategies to develop and protect the Istranca mountains as a whole ecosystem.

The planning of a Nature Park in the Istranca mountains due to the Turkish legislation could solve this problem. A Nature Park is suitable planning instrument to protect valuable areas for biodiversity, for landscape aesthetics and for recreational activities and to develop the sustainable management of natural resources.

The **strength** of the long term planning of a Nature Park is that such a venture can function as a Turkish “umbrella project” incorporating a variety of smaller projects that share a common

objective – to balance the differences in terms of nature conservation between the Strandja and the Istranca region. The designation of a Nature Park within the Turkish legislation would provide a strong legal commitment to protect and develop the region.

However, the **weakness** of this approach is that the legal procedures required to implement a Nature Park are extremely difficult to plan and time. Too many unknowns can cause unforeseen delays that may **threaten** both the success of the project and the success of the CBC programme.

For example, under current Turkish National Park law, only public land could be part of the Nature Park area. The inclusion of private land – which could open up many interesting additional opportunities (e.g., the promotion of organic farming) – is questionable and will need further legal investigation.

Nevertheless, if such a Nature Park were to become a reality, it would provide a tremendous **opportunity** to establish a set of "best practices" in areas such as nature conservation, forestry, ecotourism, organic farming, and in rural and urban development, and to implement those practices on a long term basis.

Last but not least, the establishment of such a Nature Park would be an opportunity to establish a cooperative linkage with the Nature Park administration in Malko Turnovo. The Turkish and Bulgarian organisations could share experiences and know-how, something that could go a long way toward equalising the planning situation on both sides of the border.

Unfortunately, due to the national legal character of the Nature Park in Strandja and that of a potential Park in Istranca, a future merging of the Parks to create the legal construction of a transboundary Nature Park would be more problematic than the creation of a Transboundary Biosphere Reserve (TBR).

Transboundary Biosphere Reserve (TBR)

Such legal and national restrictions can be avoided by planning a Transboundary Biosphere Reserve (TBR) according the recommendations of the UNESCO Man and Biosphere Programme. Such a TBR implies international standards in terms of nature protection and regional development.

As borders between states are political and not ecological, ecosystems often span national boundaries, and may be subject to differing, or even conflicting, management and land use practices.

The **strength** of a TBR is that it provides a tool for common management. A TBR is officially recognised at the international level, and by a UN institution with the political will to cooperate in conservation and sustainable use through the collaborative management of a shared ecosystem. A TBR also represents a commitment of two countries to jointly apply the Seville Strategy for biosphere reserves, and to work together to meet its objectives. There is increasing recognition of the appropriateness of the ecosystem approach for conservation and sustainable use of biological diversity. In addition, the TBR concept implies a zoning approach to developing a region, one that recognises the sometimes conflicting needs of nature and human beings (this is discussed in more detail below). For these reasons, a TBR is well-suited as a common umbrella under which a variety of project activities can take place in a coordinated way.

Although a TBR has many strengths, there is a potential **weakness** on the legal side. National legislation is an important instrument in the protection and development of areas such as nature

reserves and nature parks *within individual countries.* In contrast, a TBR is primarily a *framework* for common, coordinated activities, and lacks the legal protection that, for example, a national park would normally have. This means that when a TBR is established, the areas within the core zone of the TBR must be designated as nature reserves under the national legislation of the cooperating countries in order to guarantee sustainable protection.

In this project, the **opportunity** that a TBR unquestionably brings to the table is the possibility of creating a common protected area, managed with close cooperation between Turkey and Bulgaria, and implementing international standards for nature conservation. The further development of such a TBR beyond the 2005/06 funding period – and the ongoing effort to continually improve cross-border cooperation and sustainable management of natural resources in the Istranca Mountains border region – will be, at the same time, both an **opportunity** and a **challenge** for the project beneficiaries.

Both Bulgaria and Turkey support the establishment of a TBR, as was made clear during many meetings and discussions with a broad range of stakeholders in both countries. But its implementation also requires acceptance and willingness at the political level. Long border control procedures, and the inaccessibility of the closer border area together with other political and administrative obstacles, are all potential **threats** to the success of such a TBR.

Biosphere Reserve

For the establishment of a TBR there are two options:

(a) the TBR can be created by merging two national Biosphere Reserves (BRs), or

(b) the TBR can be planned from the outset as a common protected area.

The arguments in favour of Option (a) recognise the differing planning situations in Turkey and Bulgaria (previously discussed).

Under Option (a), each country would have to complete different tasks during the initial funding period (2005) in order to pave the way for a TBR. By planning and establishing national BRs first, both countries would gain valuable experience and could gradually implement the transboundary communication infrastructure necessary to exchange information, define common standards, harmonise existing regulations and, finally, develop a joint monitoring system and coordinated funding scheme (see the definition of a Grant Scheme in the project fiches in the Annex).

Communication problems and a possible lack of consensus, would have a much more negative impact on a successful completion of the CBC projects under Option (b) than under Option (a).

Worldwide, to date all existing TBRs have been established through the merging of two (or more) separate BRs or other protected areas, suggesting that this may also be the best strategy to follow for Strandja / Istranca. Bulgaria is well prepared to establish a BR on its own territory since the pre-conditions are already met by the existing Strandja Nature Park. In Turkey, a number of legal, administrative and natural prerequisites will first have to be put in place by coordinated mirror activities funded under the CBC programme.

The **strength** of the BR approach is that a BR can be established without the need for legal approval (for more details see the next section). The lack of legal protection for ecologically valuable areas can be seen as a **weakness**. But there is an **opportunity** to mitigate this shortcoming by planning a core zone of nature reserves protected under the national legislation.

The **threat** of this planning approach is alluded to in the somewhat vague MAB/UNESCO ecological and planning standards required to obtain the official designation of the BR. This could result in the establishment of BRs with huge differences in size, ecological planning and nature protection quality (e.g. the relatively small Uzunbudjak nature reserve in the Strandja Nature Park has been declared as a BR).

In conclusion, the discussion of the pros and cons of a national BR compared to a Nature Park led to the plan outlined in the 2005/06 project fiches: by the end of the 2005 funding period the Strandja and Istranca BRs will have been established; during the 2006 funding period all activities will focus on the merging of the two BRs and the establishment of a common TBR.

PHARE Instruments

According to the PHARE programming guidelines, there are three suitable ways to implement such a joint project: either by means of (a) a Twinning Project, an instrument designed for Institution Building and based on co-operation between public administrations in Member States and Candidate Countries or alternatively, (b) by Technical Assistance Programmes, which are suitable for more complex development and planning projects. Finally (c) Civil Society Programmes are adequate to fund projects run by NGOs and NPOs.

Considering the specific situation in the Strandja / Istranca mountains, it is being recommended to pursue the establishment of a BR and TBR by means of PHARE Technical Assistance Project.

4.2 THE BIOSPHERE RESERVE CONCEPT

The concept of Biosphere Reserves was initiated by UNESCO's Man and the Biosphere (MAB) Programme in 1974. The Biosphere Reserve Network was launched in 1976 and, as of 30 November 2004 had grown to include 459 Biosphere Reserves in 97 countries.

The Network is a key component in MAB's objective of achieving a sustainable balance between the sometimes-conflicting goals of conserving biological diversity, promoting economic development, and maintaining associated cultural values. Biosphere Reserves are sites where this objective is tested, refined, demonstrated and implemented. The link between conservation of biodiversity and the development needs of local communities - a central component of the biosphere reserve approach - is recognised as a key feature of the successful management of most national parks, nature reserves and other protected areas.

Biosphere Reserves are areas of terrestrial and coastal/marine ecosystems or a combination thereof, which are internationally recognised within the framework of UNESCO's Programme on Man and the Biosphere (MAB). Reserves are nominated by national governments; each Reserve must meet a minimal set of criteria and adhere to a minimal set of conditions before being admitted to the Network. Each Biosphere Reserve is intended to fulfil three complementary functions:

- **a conservation function**, to preserve genetic resources, species, ecosystems and landscapes;
- **a development function**, to foster sustainable economic and human development, and
- **a logistic support function**, to support demonstration projects, environmental education and training, and research and monitoring related to local, national and global issues of conservation and sustainable development.

Physically, each Biosphere Reserve should contain three elements:

- one or more **core areas**, which are securely protected sites for conserving biological diversity, monitoring minimally disturbed ecosystems, and undertaking non-destructive research and other low-impact uses (such as education);
- a clearly identified **buffer zone**, which usually surrounds or adjoins the core areas, and is used for cooperative activities compatible with sound ecological practices, including environmental education, recreation, ecotourism and applied and basic research;
- and a flexible **transition area**, or area of cooperation, which may contain a variety of agricultural activities, settlements and other uses, and in which local communities, management agencies, scientists, non-governmental organisations, cultural groups, economic interests and other stakeholders work together to manage and sustainably develop the area's resources.

Although originally envisioned as a series of concentric rings, the three zones have been implemented in many different ways in order to meet local needs and conditions. In fact, one of the greatest strengths of the Biosphere Reserve concept has been the flexibility and creativity with which it has been realised in various situations.

Some countries have enacted legislation specifically to establish Biosphere Reserves. In many others, the core areas and buffer zones are designated (in whole or in part) as protected areas under national law. A large number of Biosphere Reserves simultaneously belong to other national systems of protected areas (such as national parks or nature reserves) and/or other international networks (such as World Heritage or Ramsar sites).

Ownership arrangements may vary, too. The core areas of Biosphere Reserves are mostly public land, but can be also privately owned or belong to non-governmental organisations. In many cases, the buffer zone is in private or community ownership, and this is generally the case for the transition area.

There have also been important innovations in the management of Biosphere Reserves themselves. New methodologies for involving stakeholders in decision-making processes and resolving conflicts have been developed, and increased attention has been given to the need to use regional approaches. New kinds of Biosphere Reserves, such as cluster and Transboundary Reserves, have been devised, and many Biosphere Reserves have evolved considerably, from a primary focus on conservation to a greater integration of conservation and development through increasing cooperation among stakeholders. And new international networks, fuelled by technological advances, including more powerful computers and the Internet, have greatly facilitated communication and cooperation between biosphere reserves in different countries.

In this context, the Executive Board of UNESCO decided in 1991 to establish an Advisory Committee for Biosphere Reserves. This Advisory Committee considered that it was time to evaluate the effectiveness of the 1984 Action Plan, to analyse its implementation, and to develop a strategy for biosphere reserves as we move into the 21st Century.

To this end, and in accordance with Resolution 27/C/2.3 of the General Conference, UNESCO organised the International Conference on Biosphere Reserves at the invitation of the Spanish authorities in Seville (Spain) from 20 to 25 March 1995. This Conference was attended by some 400 experts from 102 countries and 15 international and regional organisations.

The Seville Conference concluded that, in spite of the problems and limitations encountered with the establishment of biosphere reserves, the programme as a whole had been innovative and had had many successes. In particular, the three basic functions would be as valid as ever in the coming years. In the implementation of these functions and in the light of the analysis undertaken,

ten key directions were identified by the Conference, which are the foundations of the new Seville Strategy (see Annex 5.7).

Some important outputs of the Seville Conference, directly related and applicable to Strandja / Istranca are:

Key direction 2

Develop biosphere reserves that include a wide variety of environmental, biological, economic and cultural situations, going from largely undisturbed regions and spreading towards cities. There is a particular potential, and need, to apply the biosphere reserve concept in the coastal and marine environment.

Key direction 6

Extend the transition area to embrace large areas suitable for approaches such as ecosystem management, and use biosphere reserves to explore and demonstrate approaches to sustainable development at the regional scale. For this, more attention should be given to the transition area.

The Seville Strategy

Objective I.2 (1): "Encourage the establishment of transboundary biosphere reserves as a means of dealing with the conservation of organisms, ecosystems, and genetic resources that cross national boundaries"

Objective I.2 (5): “Use biosphere reserves for in situ conservation of genetic resources, including wild relatives of cultivated and domesticated species, and consider using the reserves as rehabilitation / re-introduction sites, and link them as appropriate with ex situ conservation and use programmes”.

Objective II.1 (3): Establish, strengthen or extend biosphere reserves to include areas where traditional lifestyles and indigenous uses of biodiversity are practiced (including sacred sites), and/or where there are critical interactions between people and their environment (e.g. peri-urban areas, degraded rural areas, coastal areas, freshwater environments and wetlands).

Objective III.1 (5): Develop a clearing-house for research tools and methodologies in biosphere reserves.

Objective III.1 (9): Develop a functional system of data management for the rational use of research and monitoring results in the management of the biosphere reserve.

Objective III.2 (3): Encourage the participation of biosphere reserves in national programmes of ecological and environmental monitoring, and development of linkages between biosphere reserves and other monitoring sites and networks.

Objective III.2 (4): Use the reserve for making inventories of fauna and flora, collecting ecological and socio-economic data, making meteorological and hydrological observations, studying the effects of pollution, etc., for scientific purposes and as the basis for sound site management.

Transboundary Biosphere Reserves

The debates on Transborder Biosphere Reserves were held in early 1990s at the MAB meeting in Kiev (May 1990) and during the EUROMAB - IV meeting (June 1993) in Zakopane (Tatras). In 1992, the Czech-Polish Karkonosze Biosphere Reserve and Polish-Slovakian Tatry Biosphere

Reserve were created. The next Transborder Biosphere Reserves were accepted in 1998: French-German Vosges du Nord - Pfalzerwald and the Romanian-Ukrainian Danube Delta. (See Annex 5.7 (C): Recommendations for the establishment and functioning of transboundary biosphere reserves.)

5 ANNEX

5.1 DRAFT PROJECT FICHE TURKEY 2005 (SEE SEPARATE FILE)

5.2 DRAFT PROJECT FICHE TURKEY 2006 (SEE SEPARATE FILE)

5.3 DRAFT PROJECT FICHE BULGARIA 2005 (SEE SEPARATE FILE)

5.4 LIST OF EXPERT PROFILES

The following list includes specialists with the adequate expertise necessary to complete the proposed projects. A multidisciplinary team will be contracted for the completion of the project. The team will comprise professionals with extensive relevant experience in the region and/or at the international level. Where possible, the team shall be supported by local personnel. All international experts will ensure that local staff fully understand the concepts, methods and procedures applied and implemented by the project, so that by the end of the venture they are fully capable of maintaining and further developing programmes according to the long term objectives of the CBC programme. The consultants should have full command of spoken and written English and exemplary report writing skills; Turkish and/or Bulgarian will be an asset.

- *Team Leader* -The expert will have an academic degree in land use planning, landscape architecture, forest science or earth sciences with specialisation in Land Use Planning and Nature Conservation. He/She will have at least 15 years of working experience. He/she will have a practical background at international level on integrated surveys. His/her own field experience should cover a sound knowledge of landscape planning, public participation and mediation processes, forest recreation and eco-tourism, nature protection and assessment methodologies of biodiversity. Adaptability is proven by a diversified experience, preferably developed in Europe (Western and Eastern Europe). He/she should have research and analytical skills, as well as management and decision working routine. The ideal candidate will also be experienced in the training of personnel. Sound English knowledge is requested; Turkish and/or Bulgarian will be an asset.
- *Specialist in Nature Conservation* - The expert will be an experienced researcher/consultant with university degree (or similar academic degree), experience in nature conservation and assessment methodologies for biodiversity, eco-tourism and preferably knowledge of the border region. Relevant activities demonstrating this experience should have been carried out during the last 8 years. Work experience with the FFH - and the Birds directive is requested. The expert should be fluent in English, both written and spoken, be able to work in an international team and have good communication skills. The ability to speak Turkish and/or Bulgarian will be an asset.
- *GIS Specialist* - He/she must have an academic degree, with at least 10 years of working experience in the field of Geographic Information Management. He/she should demonstrate sound experience in developing and implementing an operational GIS infrastructure for the management of natural resources in an international environment. A sound knowledge of practised international standards to collate, describe and exchange spatial data is required. A comprehensive understanding of ecological processes and methods of natural resource management is essential. A good insight into the latest Information Technology developments

is an asset. The ideal candidate will also be experienced in the training of personnel. Sound English knowledge is requested; Turkish and/or Bulgarian will be an asset.

- *IT and Web Expert* - The IT expert must have good technical computer skills and experience in setting up and maintaining a network infrastructure (LAN, Intranet, Internet) within a Windows and/or Unix/Linux environment. He/she must be able to design and program an interactive web page using a common Markup Language (e.g. HTML or XML) and Scripting Codes (e.g. PHP, VBScripts or Java Scripts). He/she should be familiar with the management of common databases management. English knowledge is requested; Turkish and/or Bulgarian will be a strong asset.
- *Legal Adviser* - The candidate will have an academic background in law, with an experience of at least 15 years and have specific knowledge of international and European legislation concerning issues related to nature conservation, land use, environmental policies, and land ownership. Previous experience in the same field in Turkey or neighbouring countries represent an advantage. Sound knowledge of English and Turkish is requested; Bulgarian will be an asset.
- *Agronomist* - The expert will have an academic degree in agronomy, agricultural economics or business with specialisation in organic farming and land use planning and at least 10 years of working experience. A comprehensive background in integrated agricultural systems, land utilisation types, land and crop requirements, evaluation of land qualities and characteristics, land suitability classification, erosion control and land consolidation is required. Experience in Europe (Western and Eastern) or in the Mediterranean area is requested. He/she should have study and analytical skills, as well as management and decision capacity. The ideal candidate will also be experienced in training of personnel. Sound English knowledge is requested; Turkish and Bulgarian will be a strong asset.
- *Forestry Expert* - The expert has an academic degree in forestry with specialisation on all socio-economic aspects of multi-purpose forest management, with at least 10 years of working experience. A strong experience is required in planning the different functions of the forests addressing the needs of the local people and biodiversity. Knowledge in the application of Forest certification systems (PEFC, FSC) is required. Experience in Europe (Western and Eastern) or the Mediterranean area is requested. He/she should have study and analytical skills, as well as management and decision capacity. The ideal candidate will be also experienced in training of personnel. Sound English knowledge is requested; Turkish and/or Bulgarian will be an asset.
- *Backstopping* - The complexity of the project, the number of experts involved and their high turn over require a sound backstopping activity. The person responsible for backstopping should demonstrate an area of activity with extensive (15 years at least) experience in development and institution building in European countries. He/she is a project co-ordinator, has practical experience of working in EU and East European countries and he is aware of EC PHARE procedures.
- *Urban/Regional Planner* – The expert will have an academic degree in urban and regional planning or in similar spatial planning disciplines having at least 10 years working experiences in the planning of environmentally sensitive areas and the completion of management and development plans for coastal zones and protected areas. A comprehensive understanding of methods of natural resource management is required. Ideal candidates will also be experienced in eco-tourism planning. Turkish and/or Bulgarian will be an asset.
- *Abiotic monitoring specialist* - Will be responsible for development of the Strandja / Istranca TBR abiotic component monitoring system. The abiotic monitoring specialist should work closely with the biodiversity and socio-economic monitoring specialists, developing the

Strandja / Istranca TBR integrated monitoring system. S/he will have the following qualifications:

- University degree in ecology or other relevant area.
- Experience in the development of abiotic monitoring systems.
- Good knowledge of Bulgarian and / or Turkish systems for abiotic monitoring.
- Good coordination skills and ability to work in multidisciplinary teams.
- Fluency in spoken and written Bulgarian and / or Turkish.
- Fluency in spoken and written English.
- Excellent reporting skills.
- Computer literacy (Word, Excel).
- Preferably experience in work with GIS, data bases, etc.

- *Biodiversity monitoring specialist -* Will be responsible for development of the Strandja / Istranca TBR biodiversity component monitoring system. The biodiversity monitoring specialist should work closely with the abiotic and socio-economic monitoring specialists, developing the Strandja / Istranca TBR integrated monitoring system. The biodiversity monitoring specialist will have the following qualifications:
  - University degree in botany, zoology, forestry or other relevant area.
  - Good knowledge of the biodiversity of the region of Strandja / Istranca.
  - Good knowledge of Bulgarian and / or Turkish systems / practices for biodiversity monitoring.
  - Good coordination skills and ability to work in multidisciplinary teams.
  - Fluency in spoken and written Bulgarian and / or Turkish.
  - Fluency in spoken and written English.
  - Excellent reporting skills.
  - Computer literacy (Word, Excel).
  - Preferably experience in work with GIS, data bases, etc.
- *Socio-economic monitoring specialist -* Will be responsible for development of the Strandja / Istranca TBR socio-economic component monitoring system. The socio-economic monitoring specialist should work closely with the abiotic and biodiversity monitoring specialists, developing the Strandja / Istranca TBR integrated monitoring system. S/he will have the following qualifications:
  - University degree in sociology or other relevant area.
  - Good knowledge of international practices for socio-economic monitoring.
  - Preferably experience in nature conservation linked socio-economic studies.
  - Good coordination skills and ability to work in multidisciplinary teams.
  - Fluency in spoken and written Bulgarian and / or Turkish.
  - Fluency in spoken and written English.
  - Excellent reporting skills.
  - Computer literacy (Word, Excel).
  - Preferably some experience in work with GIS, data bases, etc.
- *Capacity Building Specialist -* The specialist ill be responsible for capacity building in the fields of nature conservation , environmental issues and village/urban development aimed at government staff at the regional, provincial and local level as well at NGOs and local populations. S/he will organise workshops and training courses aimed at specific defined target groups and develop curricula for the same. The specialist will have the following qualifications:
  - At least 15 years practical experience from environmental capacity building at both government, NGO and local levels;

- Experience in capacity building from Central/Eastern European countries;
- Preferably some knowledge of identifying and preparing projects according to EC requirements;
- Familiarity with EC procedures;
- Good coordination skills and ability to work in multidisciplinary teams;
- Excellent reporting skills;
- Fluency in spoken and written English;
- Computer literacy (Word, Excel)
- A knowledge of Bulgarian/Turkish will be a further asset.

- *Awareness Building Specialist* - The specialist will be responsible for awareness building on nature conservation, environmental issues and the values of protected nature and culture. S/he will develop an awareness building strategy aimed at forest and coastal populations, schools and other educational institutions as well as aimed at government personnel. S/he will develop educational and promotional materials for all target groups but with a special focus on children (schools) and youth. The specialist will have the following qualifications:
  - At least 15 years practical experience from awareness building and the production of awareness building materials;
  - Experience from working with school children and youth as well as from awareness building aimed at rural and urban/semi-urban populations.
  - Experience in awareness building from Central/Eastern European countries;
  - Preferably some knowledge of identifying and preparing projects according to EC requirements;
  - Familiarity with EC procedures;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;
  - Fluency in spoken and written English;
  - Computer literacy (Word, Excel)
  - A knowledge of Bulgarian/Turkish will be a further asset.
- *Eco-tourism Planner* - Will be responsible for planning the eco-tourism part of the Trans-boundary Biosphere Reserve and to oversee and act as team leader for all other tourism related planning work. The Eco-tourism Specialist will be responsible for report editing and integration of inputs from all other tourism related specialists. S/he should be a category I expert and have the following qualifications:
  - A full university degree in environmental planning or in botany, zoology, forestry or other relevant area;
  - A minimum of 15 years experience in eco-tourism planning, and specific experience in planning forest eco-tourism;
  - Preferably experience from Central/Eastern European countries;
  - Experience in identifying and preparing projects according to EC requirements;
  - Familiarity with EC procedures;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;
  - Fluency in spoken and written English;
  - Computer literacy (Word, Excel)
  - A knowledge of Bulgarian/Turkish will be a further asset.
- *Tour Operations and Marketing Specialist* - Will be responsible for the design of tour programmes and itineraries and for establishing linkages to coastal hotels and major tour operators/tour wholesalers. S/he should also be responsible for the development of a

marketing/promotional strategy especially focusing on product seasonality. S/he will have the following qualifications:

- Hands-on practical experience from tour operations the organisation of tour programmes; relating to nature subjects and nature experiences;
- A minimum of 15 years experience in tourism planning, marketing and promotion;
- Practical experience from marketing and promoting eco-tourism;
- Excellent knowledge of the hotel, tour operations and tour wholesale sector;
- Preferably experience from Central/Eastern European countries;
- Preferably some experience in identifying and preparing projects according to EC requirements;
- Preferably some familiarity with EC procedures;
- Good coordination skills and ability to work in multidisciplinary teams;
- Excellent reporting skills;
- Fluency in spoken and written English;
- Computer literacy (Word, Excel)
- A knowledge of Bulgarian/Turkish will be a further asset.

- *Outdoor activities and Trails specialist* - Will be responsible for creating a network of trails of different grades of difficulty aimed at different visitor profiles, including hiking trails, bicycle trails and trails for the elderly, handicapped and families with small children, and for the establishment of a programme for trail maintenance. S/he will have the following qualifications:
  - Experience in the development of “green” trails in a number of protected forest environments;
  - Good knowledge of forest biodiversity and nature/culture protective measures;
  - Knowledge in the signage and visitor friendly information boards;
  - Knowledge of trail grading;
  - Knowledge of trail maintenance;
  - Preferably experience from Central/Eastern European countries;
  - Preferably some experience in identifying and preparing projects according to EC requirements;
  - Preferably some familiarity with EC procedures;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;
  - Fluency in spoken and written English;
  - Computer literacy (Word, Excel)
  - A knowledge of Bulgarian/Turkish will be a further asset.
- *Tourism SME Development Specialist* - Will be responsible for the establishment of training programmes for the establishment of local SMEs catering to tourist- and excursionist visitors. The SME specialist will have the following qualifications:
  - A minimum of 10 years experience of SME development in rural and peripheral areas;
  - Experience from working with tourism oriented SMEs;
  - Working knowledge from Central/Eastern European countries;
  - Knowledge of visitor preferences for local products and of the development of local handicrafts and local agricultural products;
  - Knowledge of product labelling, display and marketing;
  - Experience in identifying and preparing projects according to EC requirements;
  - Familiarity with EC procedures;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;

- Fluency in spoken and written English;
- Computer literacy (Word, Excel)
- A knowledge of Bulgarian/Turkish will be a further asset.

- *Museum/Exhibitions Specialist* - Will be responsible for the interior organisation of displays and selection of subjects to be covered in visitors centres and small museums. The specialist will also develop a management and maintenance plan for exhibitions. The specialist will have the following qualifications:
  - At least 15 years practical experience from museum work and the organisation of exhibitions;
  - Good knowledge of nature- and culture oriented exhibitions;
  - Practical experience in the presentation of exhibits, museum shops and the design/procurement of showcases, dioramas etc.
  - Preferably experience from Central/Eastern European countries;
  - Preferably some knowledge of identifying and preparing projects according to EC requirements;
  - Preferably some familiarity with EC procedures;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;
  - Fluency in spoken and written English;
  - Computer literacy (Word, Excel)
  - A knowledge of Bulgarian/Turkish will be a further asset.
- *Botanist* - The botanist should work closely with the Tour Operations and Marketing Specialist and the Trails Specialist. S/He should develop a seasonality product focusing on specific plants and plant communities according to seasons and be responsible for providing simple and interesting descriptions of such plants/plant communities. The botanist will have the following qualifications:
  - A full academic degree in botany preferably with zoology as a minor subject;
  - An interest in, and knowledge of, Ethno botany;
  - Good knowledge of the botany of European Bulgaria/Turkey;
  - Preferably some knowledge of small plant related wildlife (entomology etc.);
  - An interest, and some experience, in the presentation of botanical/nature subjects to a non-specialist audience;
  - Good coordination skills and ability to work in multidisciplinary teams;
  - Excellent reporting skills;
  - Fluency in spoken and written English;
  - Computer literacy (Word, Excel)

5.5 COST CALCULATION SHEET

BREAKDOWN OF PRICES Project Fiche TURKEY 2005				
	UNIT	**UNIT RATE**	**N° UNITS**	**AMOUNT (EURO)**
A FEES				
Long-Term Team Leader	man/month	17000	24	408000
LT Conservation Spec.	man/month	13000	22	286000
LT GIS Spec.	man/month	13000	7	91000
Short-Term experts (IT)	man/day	500	60	30000
Backstopping	man/day	600	30	18000
Local Personnel	man/day	350	200	70000
Total A				**903000**
B PER DIEM				
Per diem L.T:	day			0
Perdiem S.T	day	140	60	8400
Total B				**8400**
C DIRECT EXPENSES				
Telecommunications	month	500	24	12000
Car operation	month	500	48	24000
Office operation	month	500	24	12000
Housing allowance	month	1300	24	31200
Insurance	Lump sum			1900
Flight Tickets	N°	500	15	7500
Total C				**88600**
Total A+B+C				**1000000**
D OTHER SUPPLY				
4x4 Car	N°	40000	1	40000
standard car	N°	20000	1	20000
Office facilities	Lump sum			10000
GIS/IT equipment	Lump sum			60000
Material (sat. Imagery, etc)	Lump sum			20000
Contingencies	Lump sum			0
Total D				**150000**
TOTAL A+B+C+D				**1150000**

BREAKDOWN OF PRICES TURKEY 2006 Project Fiche TURKEY 2006				
	UNIT	**UNIT RATE**	**N° UNITS**	**AMOUNT (EURO)**
A FEES				
1 Long-Term Team Leader	man/month	17000	24	408000
1 Tourism Spec.	man/month	13000	12	156000
3 Monitoring System Spec.	man/month	13000	24	312000
1 Agronomist Spec.	man/month	13000	10	130000
1 Coastal/Urban Planner	man/month	13000	10	130000
1 Forestry Expert	man/month	13000	10	130000
1 GIS Expert	man/month	13000	7	91000
5 Short-Term Tourism	man/day	600	660	396000
2 Short-Term Capacity Building	man/day	600	240	144000
1 Short-Term IT experts	man/day	600	120	72000
1 Short-Term Legal Advicer	man/day	600	120	72000
Backstopping	man/day	700	60	42000
Local Personnel	man/day	350	300	105000
Total A				**2188000**
B PER DIEM				
Per diem L.T:	day			0
Perdiem S.T	day	140	1200	168000
Total B				**168000**
C DIRECT EXPENSES				
Telecommunications	month	500	24	12000
Flight tickets	N°	500	30	15000
Car operation	month	500	48	24000
Office operation	month	500	24	12000
Housing allowance	month	3300	24	79200
Insurance	Lump sum			1800
Total C				144000
Total A+B+C				**2500000**

D OTHER SUPPLY				
Car	N°	40000	1.5	60000
Office facilities	Lump sum			20000
GIS/IT/GPS equipment	Lump sum			90000
Material (sat. Imagery, etc)	Lump sum			20000
Monitoring System	Lump sum			185000
Contingencies	Lump sum			0
Total D				**375000**
E Grant Scheme				
Visitor Centres	N°	80000	3	240000
Watch Towers	N°	50000	3	150000
Guest house restoration	N°	10000	30	300000
Organic Farms	N°	20000	5	100000
Recreation Facilities	N°	10000	40	400000
Research Projects	N°	100000	3	300000
Others (Small infrasturcture etc.)	N°	15000	9	135000
Total E				**1625000**
TOTAL A+B+C+D+E				**4500000**

5.6 ROUND-TABLE-MEETING IN KIRKLARELI

Venue and Participants

Venue: Governorship Kirklareli
Date: 4.January 2005, 14:30 – 19:00
Participants:

Name	Institution
Ismet Metin	Kirklareli Governor
Ruhi Eray	CBC Projects Coordinator in Kirklareli Governorship
Yilmaz Kemal Aslan	Deputy Major of Kirklareli
Kamer Tuna	Mayor of Demirköy
Selçuk Yilmaz	Mayor of Vize
Nihat Öztürk	Mayor of Kofcaz
Sahin Akbal	Director of Kirklareli Forest Operation Department
Ahmet Kara	Director of Demirköy Forest Operation Department
Ali Özmakas	Provincial Director of Provincial Special Administration
Ömer Bülent Arslan	Provincial Director of Agriculture and Rural Affairs
Tamer Akgünay	Provincial Director of Culture and Tourism
Ismail Reis	Regional Directorate of Forestry
Filiz Ihtiyar	Provincial Directorate of Environment and Forestry
Fikri Erbas	Provincial Directorate of Environment and Forestry
Dr. Fetih Bakanoglu	Ataturk Research Institute for Village Affairs
Prof. Dr. Kayihan Z. Korkut	Trace University – Faculty of Agriculture
Prof. Dr. Hasan H. Tok	Trace University – Faculty of Agriculture
Markus Weidenbach	Consultant (Team leader) MWH/EC
Nils Munch – Petersen	Consultant MWH/EC
Kiril Georgiev	Consultant MWH/EC
A. Saffet Atik	Consultant MWH/EC

Table 5: Participants of Round-Table-Meeting in Kirklareli

Views and Expectations of Participants by Sectors

The objective of the meeting was to discuss the main land use sectors, land use conflicts, possible solutions and potential projects in the scope of the CBC programme by means of the Metaplan Discussion Technique. After a short introduction to the thematic issues of the CBC programme, the participants were asked to express their views concerning Agriculture, Forestry, Fishery, Biodiversity, Tourism and Urban Development by writing down keywords on small coloured note sheets. The different coloured sheets were sorted and pinned to the wall representing the different land use sectors. Using note sheets to moderate the discussion has the advantage, that everybody in the round has the possibility to express his opinion in an anonymous way, if wanted. After a short break, the note sheets on the wall were presented by Saffet Atik in Turkish and discussed with the group.

The comments and keywords on all note sheets are listed below.

Nature Conservation and Biodiversity

The comments to this topic are mainly related to the need to characterize herbaceous and woody plant species of the Istranca (Yildiz) Mountains morphologically and genetically, and to develop optimal methods for the conservation of natural resources, so as to ensure cross border cooperation.

- Identification of the plants in the Region, and Projects related to the analysis-promotion of these plants.
- Project related to the protection of natural speckled trout grown in Degirmendere in the Region.
- Projects related to the protection and development of wild life in the Region.
- Organizing working groups for the determination of the biological diversity in the Region.
- To grow medical and aromatic plants.
- Protection and development of the plants and animals peculiar to the Region.
- Making inventory studies related to especially biological diversity, determination of the value of the resources, and for the right and appropriate use of these resources, to re-structure the managerial units (providing the participation of the people of the region by these managerial units.).

Forestry

- Project of protection of Istranca Forests against biotic risk factors.
- Determination and identification of biotic risks in Istranca Forests, struggling and preventive measures against epidemic spreading out.
- The protection and development of endemic plant species, which have to be determined.
- The analysis and determination of the present decline and partial drying of oak stands, determination of the method of treatment, research of the existence or non-existence of harmful mushrooms.
- To incline towards hunting tourism by establishing hunting ground facility and training of the people of the Region about pensioning and guidance.
- Training the people of the Region related to the protection of the forests, and involve the locals by means of public participation activities
- Development of wild life and supporting the people of the Region by providing opportunities in this respect.
- Flora and Fauna determination, inventory studies and preparation and practice of management plan. (As a result, hunting tourism would help the development of the people of the Region.)
- Projects related to forestry and to improve the income situation of the village people have to be prepared and supported.
- For the protection of the forests and for the sustainability of this process, to make legal arrangements (national or international) related to the increase of the revenue of the forest villages, and by making inventory studies of the present assets (fauna, flora), arranging projects for the sustainable use of these assets.

- Development of integrated forestry, and providing opportunities for the local population in the region to receive more input from the present forests.

Eco-Tourism

- Development of nature related tourism for day tripper or weekend holidays (trekking, camping etc.).
- Preparing the infrastructure for scientific tourism, including the development of opportunities to organise scientific excursions for interested nature lovers.
- In each forest village, repair of one or two structures that is in accordance with the region, or establishment of new facilities and accommodation pensions.
- To provide a revenue source system for the people of the region, by the start and realization of the eco-tourism activities and the sustainability of these activities.
- Nature Sports Tourism (trekking, bicycle tours, wild life etc.) in the Region.
- Winter (Mountain) Tourism and Plateau Tourism in the Region.
- Water Sports, Trekking, Ornithology, Flora and Fauna Analysis.
- Hunting Tourism in the Region.
- Promotion of Demirköy Foundry .
- Promotion of Dupnisa Cave.
- Expansion of the roads.
- Preparation of projects related to the history of Vize (History of Vize goes back to 6000 BC) taking the Black Sea coast into consideration, summer tourism could be promoted.

Agriculture

- The establishment of wine industry in the foots of Istranca which is one of the three local places in Europe which grape is best being grown, by providing encouragement for viniculture.
- For the afforestation of the forest areas with linden trees, chestnut, walnut, providing a finance opportunity for the people of the region.
- An mobile soil analysis vehicle to prevent the excessive use of dung (fertilizer) by locals, and practical training activities for the people of the region related to the protection of soil and water.
- The development of organic farming.
- The expansion of irrigation areas.
- Land Consolidation in agriculture.
- Production diversification.
- Development of apiculture and development and protection of carnivore type of bee existing in the Istranca Region.
- Development of stock-breeding.
- Development of fruit-planting, and viniculture.
- Preparation and supporting of Organic Agriculture Project.
- Projects related to the promotion and increase of productivity of feed plants.

Fishery

- Development of fishery, because the income situation of fishermen is bad.
- Project for the development of fresh-water fishing in the rivers of the Istranca forests.
- To make the small lakes (ponds) suitable for fish hatchery.
- Develop fishing tourism
- Studies related to prevention and control of water pollution.
- Arrangement to catch different types of freshwater and sea fish providing a sustainable management for the different fish species.
- In relation with eco-tourism studies, making inventory studies of the fish species and the fish sources and how to manage it
- By establishing small dams in the Rezve River, breeding and production of fish specie like the speckled trout etc., and development of angling and picnic tourism in the area of the dams; so giving additional support to the people of the region.
- Control of the fishing-nets and the bag-shaped fishing nets by remote sensing methods.
- For the people of Kiyiköy (Vize), to develop and promote fishing as a job opportunity for the people of the region, and preparing projects to make locals able to earn their lives with fishery.
- Development of aqua-culture fishing.

Urban and Rural Development

- Sewerage Master Plan for the whole region.
- The prevention of the damages of Igneada Sewerage wastes which are polluting Longos Forests (Floated Forests), by establishing a Treatment Facility. (Fish deaths have been occurred in 2004.)
- Treatment of potable water.
- Improvement of potable water networks of urban settlements.
- Establishment of Sewerage System and Infrastructure in a systematic way
- Adequate Projects have to be prepared for Urban Planning, for Urban Settlements, and projects supporting infrastructural studies have to be prepared.
- Planning of infrastructure to improvement living conditions in border settlements.
- Inventory of watersheds
- Determination of the hydro-meteorological parameters (rain, run-off) of Rezve river basin, and by determining the sediment that could come through, making the River Basin Protection Plan, and determination of water run-off of the River Basin and making the related hydro-meteorological measures and the hydrological inventory of the River Basin.
- Development of the local population in economic terms and increasing the cultural level of the local population and making arrangements for the prevention of uncontrolled increasing population density.
- By making macro-planning and organising micro (small scale) settlement plans accordingly.

Others

- Limanköy border sea-gate shall be opened in 2005. (Demirköy-Yenice shall would be established.)
- Because of this gate that would affect the tourism in the region; the expenditures of the re-establishment of Demirköy-Yenice (22 km.) and part of the Igneada- Kirklareli road (100 km.) shall be added to the EU Cross Border Cooperation Project.
- The water of the Rezve Lake, which constitutes a joint border, and its tributary rivers flows directly into the sea. The bottling and marketing of this water as potable water would help the economical development of the local people in the region and would improve the welfare of the local population without damaging the ecology and the environment.

5.7 BIOSPHERE RESERVE CONCEPT: MATERIAL

(A) Biosphere Reserve Concept

International Conference on Biosphere Reserves

Seville (Spain)

20 - 25 March 1995

TEN KEY DIRECTIONS

1. Strengthen the contribution which biosphere reserves make to the implementation of international agreements promoting conservation and sustainable development, especially to the Convention on Biological Diversity and other agreements such as those on climate change, desertification and forests.

2. Develop biosphere reserves that include a wide variety of environmental, biological, economic and cultural situations, going from largely undisturbed regions and spreading towards cities. There is a particular potential, and need, to apply the biosphere reserve concept in the coastal and marine environment.

3. Strengthen the emerging regional, inter-regional and thematic networks of biosphere reserves as components within the World Network of Biosphere Reserves.

4. Reinforce scientific research, monitoring, training and education in biosphere reserves since conservation and rational use of resources in these areas require a sound base in the natural and social sciences as well as the humanities. This need is particularly acute in countries where biosphere reserves lack human and financial resources and should receive priority attention.

5. Ensure that all zones of biosphere reserves contribute appropriately to conservation, sustainable development and scientific understanding.

6. Extend the transition area to embrace large areas suitable for approaches such as ecosystem management, and use biosphere reserves to explore and demonstrate approaches to sustainable development at the regional scale. For this, more attention should be given to the transition area.

7. Reflect more fully the human dimensions of biosphere reserves. Connections should be made between cultural and biological diversity. Traditional knowledge and genetic resources should be conserved and their role in sustainable development should be recognized and encouraged.

8. Promote the management of each biosphere reserve essentially as a "pact" between the local community and society as a whole. Management should be open, evolving and adaptive. Such an approach will help ensure that biosphere reserves - and their local communities - are better placed to respond to external political, economic and social pressures.

9. Bring together all interest groups and sectors in a partnership approach to biosphere reserves both at site and network levels. Information should flow freely among all concerned.

10. Invest in the future. Biosphere reserves should be used to further our understanding of humanity's relationship with the natural world, through programmes of public awareness, information and formal and informal education, based on a long-term, inter-generational perspective.

International Conference on Biosphere Reserves

Seville (Spain)

20 - 25 March 1995

SEVILLE STRATEGY

The following Strategy provides recommendations for developing effective biosphere reserves and for setting out the conditions for the appropriate functioning of the World Network of Biosphere Reserves. It does not repeat the general principles of the Convention on Biological Diversity nor Agenda 21, but instead identifies the specific role of biosphere reserves in developing a new vision of the relationship between conservation and development. Thus, the document is deliberately focused on a few priorities.

The Strategy suggests the level (international, national, individual biosphere reserve) at which each recommendation will be most effective. However, given the large variety of different national and local management situations, these recommended levels of actions should be seen merely as guidelines, and adapted to fit the situation at hand. Especially note that the "national" level should be interpreted to include other governmental levels higher than the individual reserve (e.g., provincial, state, county, etc.). In some countries, national or local NGOs may also be appropriate substitutes for this level. Similarly, the "international" level often includes regional and inter-regional activities.

The Strategy also includes recommended Implementation Indicators, i.e. a check-list of actions that will enable all involved to follow and evaluate the implementation of the Strategy. Criteria used in developing the Indicators were: availability (can the information be gathered relatively easily), simplicity (are the data unambiguous), and usefulness (will the information be useful to reserve managers, National Committees, and/or the network at large). One role of the Implementation Indicators is to assemble a database of successful implementation mechanisms and to exchange this information among all members of the network.

GOAL I: Use Biosphere Reserves to conserve natural and cultural diversity

OBJECTIVE I.1: Improve the coverage of natural and cultural biodiversity by means of the World Network of Biosphere Reserves.

Recommended at the international level:

1. Promote biosphere reserves as means of implementing the goals of the Convention on Biological Diversity.

2. Promote a comprehensive approach to biogeographical classification that takes into account such ideas as vulnerability analysis, in order to develop a system encompassing socio-ecological factors.

Recommended at the national level:

3. Prepare a biogeographical analysis of the country as a basis, inter alia, for assessing coverage of the World Biosphere Reserve Network.

4. In light of the analysis, and taking into account existing protected areas, establish, strengthen or extend biosphere reserves as necessary, giving special attention to

fragmented habitats, threatened ecosystems, and fragile and vulnerable environments, both natural and cultural.

OBJECTIVE I.2: Integrate biosphere reserves into conservation planning.

Recommended at the international level:

1. Encourage the establishment of trans-boundary biosphere reserves as a means of dealing with the conservation of organisms, ecosystems, and genetic resources that cross national boundaries.

Recommended at the national level:

2. Integrate biosphere reserves in strategies for biodiversity conservation and sustainable use, in plans for protected areas, and in the national biodiversity strategies and action plans provided for in Article 6 of the Convention on Biological Diversity.

3. When applicable, include projects to strengthen and develop biosphere reserves in programmes to be initiated and funded under the Convention on Biological Diversity and other multilateral conventions.

4. Link biosphere reserves with each other, and with other protected areas, through green corridors and in other ways that enhance biodiversity conservation, and ensure that these links are maintained.

5. Use biosphere reserves for in situ conservation of genetic resources, including wild relatives of cultivated and domesticated species, and consider using the reserves as rehabilitation/re-introduction sites, and link them as appropriate with ex situ conservation and use programmes.

GOAL II: Utilize Biosphere Reserves as models of land management and of approaches to sustainable development

OBJECTIVE II.1: Secure the support and involvement of local people.

Recommended at the international level:

1. Prepare guidelines for key aspects of biosphere reserve management, including the resolution of conflicts, provision of local benefits, and involvement of stakeholders in decision-making and in responsibility for management.

***Recommended at the national level*:**

2. Incorporate biosphere reserves into plans for implementing the sustainable use goals of Agenda 21 and the Convention on Biological Diversity.

3. Establish, strengthen or extend biosphere reserves to include areas where traditional life styles and indigenous uses of biodiversity are practiced (including sacred sites), and/or where there are critical interactions between people and their environment (e.g., peri-urban areas, degraded rural areas, coastal areas, freshwater environments and wetlands).

4. Identify and promote the establishment of activities compatible with the goals of conservation through the transfer of appropriate technologies which include traditional

knowledge and which promote sustainable development in the buffer and transition zones.

Recommended at the individual reserve level:

5. Survey the interests of the various stakeholders and fully involve them in planning and decision-making regarding the management and use of the reserve.

6. Identify and address factors that lead to environmental degradation and unsustainable use of biological resources.

7. Evaluate the natural products and services of the reserve and use these evaluations to promote environmentally sound and economically sustainable income opportunities for local people.

8. Develop incentives for the conservation and sustainable use of natural resources, and develop alternative means of livelihood for local populations when existing activities are limited or prohibited within the biosphere reserve.

9. Ensure that the benefits derived from the use of natural resources are equitably shared with the stakeholders, by such means as sharing the entrance fees, sale of natural products or handicrafts, use of local construction techniques and labour, and development of sustainable activities (e.g., agriculture, forestry, etc.).

OBJECTIVE II.2: Ensure better harmonization and interaction among the different biosphere reserve zones.

Recommended at the national level:

1. Ensure that each biosphere reserve has an effective management policy or plan and an appropriate authority or mechanism to implement it.

2. Develop means of identifying incompatibilities between the conservation and sustainable use functions of biosphere reserves and take measures to ensure that an appropriate balance between the functions is maintained.

Recommended at the individual reserve level:

3. Develop and establish institutional mechanisms to manage, coordinate and integrate the biosphere reserves programmes and activities.

4. Establish a local consultative framework in which the reserve's economic and social stakeholders are represented, including the full range of interests (e.g., agriculture, forestry, hunting and extracting, water and energy supply, fisheries, tourism, recreation, research).

OBJECTIVE II.3: Integrate biosphere reserves into regional planning.

Recommended at the national level:

1. Include biosphere reserves in regional development policies and in regional land-use planning projects.

2. Encourage the major land-use sectors near each biosphere reserve to adopt practices favouring sustainable land use.

Recommended at the individual reserve level:

3. Organise forums and set up demonstration sites for the examination of socio-economic and environmental problems of the region and for the sustainable utilization of biological resources important to the region.

GOAL III: Use Biosphere Reserves for research, monitoring, education, and training

OBJECTIVE III.1: Improve knowledge of the interactions between humans and the biosphere.

Recommended at the international level:

1. Use the World Biosphere Reserve Network to conduct comparative environmental and socio-economic research, including long-term research that will require decades to complete.

2. Use the World Biosphere Reserve Network for international research programmes that deal with topics such as biological diversity, desertification, water cycles, ethnobiology, and global change.

3. Use the World Biosphere Reserve Network for cooperative research programs at the regional and inter-regional levels, such as those existing for the Southern Hemisphere, East Asia and Latin America.

4. Encourage the development of innovative, interdisciplinary research tools for biosphere reserves, including flexible modelling systems for integrating social, economic and ecological data.

5. Develop a clearing house for research tools and methodologies in biosphere reserves.

6. Encourage interactions between the World Biosphere Reserve Network and other research and education networks, and facilitate the use of the biosphere reserves for collaborative research projects of consortia of universities and other institutions of higher learning and research, in the private as well as public sector, and at non-governmental as well as governmental levels.

Recommended at the national level:

7. Integrate biosphere reserves with national and regional scientific research programmes, and link these research activities to national and regional policies on conservation and sustainable development.

Recommended at the individual reserve level:

8. Use biosphere reserves for basic and applied research, particularly projects with a focus on local issues, interdisciplinary projects incorporating both the natural and the social sciences, and projects involving the rehabilitation of degraded ecosystems, the conservation of soils and water and the sustainable use of natural resources.

9. Develop a functional system of data management for rational use of research and monitoring results in the management of the biosphere reserve.

OBJECTIVE III.2: Improve monitoring activities.

Recommended at the international level:

1. Use the World Biosphere Reserve Network, at the international, regional, national and local levels, as priority long-term monitoring sites for international programs focused on topics such as terrestrial and marine observing systems, global change, biodiversity, and forest health.

2. Encourage the adoption of standardized protocols for meta-data concerning the description of flora and fauna, to facilitate the interchange, accessibility and utilization of scientific information generated in biosphere reserves.

Recommended at the national level:

3. Encourage the participation of biosphere reserves in national programmes of ecological and environmental monitoring and development of linkages between biosphere reserves and other monitoring sites and networks.

Recommended at the individual reserve level:

4. Use the reserve for making inventories of fauna and flora, collecting ecological and socio-economic data, making meteorological and hydrological observations, studying the effects of pollution, etc., for scientific purposes and as the basis for sound site management.

5. Use the reserve as an experimental area for the development and testing of methods and approaches for the evaluation and monitoring of biodiversity, sustainability and quality of life of its inhabitants.

6. Use the reserve for developing indicators of sustainability (in ecological, economic, social and institutional terms) for the different productive activities carried out within the buffer zones and transition areas.

7. Develop a functional system of data management for rational use of research and monitoring results in the management of the biosphere reserve.

OBJECTIVE III.3: Improve education, public awareness, and involvement.

Recommended at the international level:

1. Facilitate exchange of experience and information between biosphere reserves, with a view to strengthening the involvement of volunteers and local people in biosphere reserve activities.

2. Promote the development of communication systems for diffusing information on biosphere reserves and on experiences at the field level.

Recommended at the national level:

3. Include information on conservation and sustainable use, as practiced in biosphere reserves, in school programmes and teaching manuals, and in media efforts.

4. Encourage participation of biosphere reserves in international networks and programmes, to promote cross-cutting linkages in education and public awareness.

Recommended at the individual reserve level:

5. Encourage involvement of local communities, school children and other stakeholders in education and training programs and in research and monitoring activities within biosphere reserves.

6. Produce visitors' information about the reserve, its importance for conservation and sustainable use of biodiversity, its socio-cultural aspects, and its recreational and educational programs and resources.

7. Promote the development of ecology field educational centers within individual reserves, as facilities for contributing to the education of schoolchildren and other groups.

OBJECTIVE III.4: Improve training for specialists and managers.

Recommended at the international level:

1. Utilize the World Biosphere Reserve Network to support and encourage international training opportunities and programmes.

2. Identify representative biosphere reserves to serve as regional training centers.

Recommended at the national level:

3. Define the training needed by biosphere reserve managers in the 21st century and develop model training programmes on such topics as how to design and implement inventory and monitoring programmes in biosphere reserves, how to analyze and study socio-cultural conditions, how to solve conflicts, and how to manage resources cooperatively in an ecosystem or landscape context.

Recommended at the individual reserve level:

4. Use the reserve for on-site training and for national, regional and local seminars.

5. Encourage appropriate training and employment of local people and other stakeholders to allow their full participation in inventory, monitoring and research in programmes in biosphere reserves.

6. Encourage training programmes for local communities and other local agents (such as decision makers, local leaders and agents working in production, technology transfer, and community development programmes) in order to allow their full participation in the planning, management and monitoring processes of biosphere reserves.

GOAL IV: Implement the Biosphere Reserve Concept

OBJECTIVE IV.1: Integrate the functions of biosphere reserves.

Recommended at the international level:

1. Identify and publicize demonstration (model or illustrative examples of) biosphere reserves, whose experiences will be beneficial to others, at the national, regional and international levels.

2. Give guidance/advice on the elaboration and periodic review of strategies and national action plans for biosphere reserves.

3. Organize forums and other information exchange mechanisms for biosphere reserve managers.

4. Prepare and disseminate information on how to develop management plans or policies for biosphere reserves.

5. Prepare guidance on management issues at biosphere reserve sites, including, inter alia, methods to ensure local participation, case studies of various management options, and techniques of conflict resolution.

Recommended at the national level:

6. Ensure that each biosphere reserve has an effective management policy or plan and an appropriate authority or mechanism to implement it.

7. Encourage private-sector initiatives to establish and maintain environmentally and socially sustainable activities in appropriate zones of biosphere reserves and in surrounding areas, in order to stimulate community development.

8. Develop and periodically review strategies and national action plans for biosphere reserves; these strategies should strive for complementarity and added value of biosphere reserves with respect to other national instruments for conservation.

9. Organize forums and other information exchange mechanisms for biosphere reserve managers.

Recommended at the individual reserve level:

10. Identify and map the different zones of biosphere reserves and define their respective status.

11. Prepare, implement and monitor an overall management plan or policy that includes all of the zones of biosphere reserves.

12. Where necessary, in order to preserve the core area, re-plan the buffer and transition zones according to sustainable development criteria.

13. Define and establish institutional mechanisms to manage, coordinate and integrate the reserve's programmes and activities.

14. Ensure that the local community participate in planning and management of biosphere reserves.

15. Encourage private sector initiatives to establish and maintain environmentally and socially sustainable activities in the reserve and surrounding areas.

OBJECTIVE IV.2: Strengthen the World Biosphere Reserve Network

Recommended at the international level:

1. Facilitate provision of adequate resources for implementation of the Statutory Framework of the World Network of Biosphere Reserves.

2. Facilitate the periodic review by each country of its biosphere reserves, as required in the Statutory Framework of the World Network of Biosphere Reserves, and assist countries in taking measures to make their biosphere reserves functional.

3. Support the functioning of the Advisory Committee for Biosphere Reserves and fully consider and utilize its recommendations and guidance.

4. Lead the development of communication among biosphere reserves, taking into account their communication and technical capabilities, and strengthen existing and planned regional or thematic networks.

5. Develop creative connections and partnerships with other networks of similar managed areas, and with international governmental and non-governmental organizations with goals congruent with those of biosphere reserves.

6. Promote and facilitate twinning between biosphere reserve sites and foster trans-boundary reserves.

7. Give biosphere reserves more visibility by disseminating information materials, developing communication policies, and highlighting their roles as members of the World Biosphere Reserve Network.

8. Wherever possible, advocate the inclusion of biosphere reserves in projects financed by bilateral and multilateral aid organizations

9. Mobilize private funds, from businesses, NGOs and foundations, for the benefit of biosphere reserves.

10. Develop standards and methodologies for collecting and exchanging various types of data, and assist their application across the network of biosphere reserves.

11. Monitor, assess and follow up on the implementation of the Seville Strategy, utilizing the Implementation Indicators, and analyze the factors that aid in attainment of the indicators, as well as those that hinder such attainment.

Recommended at the national level:

12. Facilitate provision of adequate resources for implementation of the Statutory Framework of the World Network of Biosphere Reserves.

13. Develop a national-level mechanism to advise and coordinate the biosphere reserves; and fully consider and utilize its recommendations and guidance.

14. Prepare an evaluation of the status and operations of each of the country's biosphere reserves, as required in the Statutory Framework, and provide appropriate resources to address any deficiencies.

15. Develop creative connections and partnerships with other networks of similar managed areas and with international governmental and non-governmental organizations with goals congruent with those of the biosphere reserves.

16. Seek opportunities for twinning between biosphere reserve and establish trans-boundary biosphere reserves, where appropriate.

17. Give biosphere reserves more visibility by disseminating information materials, developing communication policies, and highlighting their roles as members of the Network.

18. Include biosphere reserves in proposals for financing from international and bilateral funding mechanisms, including the Global Environment Facility.

19. Mobilize private funds, from businesses, NGOs and foundations, for the benefit of biosphere reserves.

20. Monitor, assess and follow up on the implementation of the Seville Strategy, utilizing the Implementation Indicators, and analyze the factors that aid in attainment of the indicators, as well as those that hinder such attainment.

Recommended at the individual reserve level:

21. Give biosphere reserves more visibility by disseminating information materials, developing communication policies, and highlighting their roles as members of the Network.

22. Mobilize private funds, from businesses, NGOs and foundations, for the benefit of biosphere reserves.

23. Monitor, assess and follow up on the implementation of the Seville Strategy, utilizing the Implementation Indicators, and analyze the factors that aid in attainment of the indicators, as well as those that hinder such attainment of Biosphere Reserves, and assist countries in taking measures to make their biosphere reserves functional.

Transborder Biosphere Reserve Examples

The Krkonose/Karkonosze Transborder Biosphere Reserve

The Krkonose / Karkonosze Mountains are part of the Sudetes in north-east Bohemia, a mountain system shared by the Czech Republic, Poland and Germany. The area is known for its high biodiversity in four altitudinal vegetation belts, from submontane to alpine. The mountains constitute a kind of ecological island of arctic and alpine ecosystems whose counterparts are found in the Alps, north and north-west Scandinavia and even in the British Isles. Major ecosystem type is mixed mountain and highland systems and major habitats and land cover types are in Czech Republic: Alpine tundra, subarctic peat bogs, dwarf pine stands, glacial corries, mountain spruce forest, mixed beech-spruce, flower rich mountain meadows and in Poland: beech forest, mountain spruce forest, subarctic scrub, subarctic herbage, subarctic peat bogs, alpine tundra.

The Krkonose / Karkonosze Transborder Biosphere Reserve was designated at 1992. On the Czech side of the biosphere reserve, there are numerous mountain meadows, a dense network of chalets, and a significant sports and tourism infrastructure. The Polish part of the biosphere reserve is much smaller, very steep, with little similar infrastructure, and is covered mostly by forests that are, on both sides of the mountains, heavily impacted by air pollution.

About 26 700 people live on the Czech side and 90 people on the Polish side of the biosphere reserve (2002). The Krkonose / Karkonosze Mountains are a popular tourist destination for hikers and skiers with about 6 - 8 million on the Czech side and 2,5 - 3 million on the Polish side (2002).

The total area is 60 362, of which 10 149 core area (Czech Republic: 8 432; Poland: 1 717), 31 783 ha buffer zone (Czech Republic: 27 925; Poland: 3 858) and 18 430 transition area (Czech Republic: 18 430; Poland: 0). The altitude (metres above sea level) is for Czech Republic: + 480 to + 1 602 and for Poland: + 400 to + 1 602.

Administrative authorities are in Czech Republic - Krkonose National Park Administration and in Poland - Karkonosze National Park Administration

Contact address: Jan Stursa, Krkonose National Park Administration and Krkonose Biosphere Reserve Administration, Dobrovskeho 3, 543 11 Vrchlabi, Czech Republic, tel.: (420.438) 456 224, e-mail: jstursa@krnap.cz

http://www.krnap.cz/Contact address: Jiri Flousek, Krkonose National Park Administration and Krkonose Biosphere Reserve Administration, Dobrovskeho 3, 543 11 Vrchlabi, Czech Republic, tel: (420.438) 456 212, (420 438) 456 224, fax: (420.438) 422 095, e-mail: jflousek@krnap.cz

Contact address; Andrzej Raj, Karkonosze National Park Administration, Chalubinskiego 23, 58-570 Jelenia Goria, Poland, tel: (48.75) 5373 26, fax: (48.75) 533 48.

Tatra/ Tatry Transborder Biosphere Reserve

The Tatra Mountains are the highest mountains in the long Carpathian range that stretches from Slovakia into Romania, via Poland, Ukraine and Hungary.

The Tatra / Tatry Transborder Biosphere Reserve was designated at 1992. The territory of the Biosphere Reserve covers two national parks on each side of the political boundary between Poland and Slovakia. Within the Transboundary Biosphere Reserve, a variety of natural features are represented, such as karst topography in dolomites and limestone, canyons and waterfalls, a dwarf pine belt, alpine meadows, lakes and rocky peaks. Major ecosystem type is temperate broadleaf forests or woodlands and major habitats and land cover types are in Poland: mixed beech forest with fir and sycamore, acidophilous spruce and spruce-fir forest, dwarf pine zone, alpine zone, subnival zone and in Slovakia: coniferous forest, subalpine krummholz, alpine tundra, subnival region, peatbogs, snow patches.

On the Polish side, tourism plays a major economic role with over 3 million visitors in 1999, each paying an entrance fee to the national park. The larger Slovak part of the Biosphere Reserve is also very frequented by visitors (3 - 4 million per year), however visitors pay no entrance fee. Main employment is provided in the tourism sector, but also in forest management.

The total area is 123 566 ha, of which 56 992 ha core area (Poland: 7 548; Slovakia: 49 444), 30 012 ha buffer zone (Poland: 6 371; Slovakia: 23 641) and 36 562 ha transition area (Poland: 3 987; Slovakia: 32 575). The altitude (metres above sea level) is for Poland: + 750 to + 2 499 and for Slovakia: + 700 to + 2 655.

Administrative authorities are for Poland: Tatra National Park, Ministry of Nature Protection, Natural resources and Forestry and for Slovakia: Tatry National Park Administration, which reports to Ministry of the Environment through the Headquarters of the State Nature Conservancy.

Contact address: W. Gasienica Byrcyn, Tatrzanski Park Narodowy, Chatubinskiego 42A, 34-500 Zakopane, Poland, tel.: (48.1820) 632 03, fax.: (48.1820) 635 79, e-mail: kozica@tpn.zakopane.pl, web site: hum.amu.edu.pl/~zbzw/ph/pnp/tatr.htm

Contact address: Tomás Vancura, Administration of the Tatra Biosphere Reserves, P.O.Box 21 059 41 Tatranská Strba, Slovakia, tel.: (421.52) 478 2002, e-mail: vancura@sopsr.sk, web site: http://www.fns.uniba.sk/zp/biosfera/brmabtau.htm, http://www.tanap.sk/park/

The Vosges du Nord / Pfälzerwald Transborder Biosphere Reserve

The Biosphere Reserve is located along the French / German border and share three natural features: water, sandstone and forests. Sandstone outcrops characterize the vast forest belt where people manage beech, oak and pine forest. Springs, streams and lakes are found in the humid valleys.
The total area is 301 800 ha, of which 1 900 ha core area, 70 000 ha buffer zone and 229 900 ha transition area. The altitude (metres above sea level) is for France: + 200 to + 580 and for Germany: + 140 to + 673.

The Natural Park of Vosges du Nord (France) was designated as a biosphere reserve in 1998, and the Pfälzerwald Natural Park (Germany) in 1992. These two parks have for some time prepared the creation of a Transboundary Biosphere Reserve and in 1998 this goal was achieved. About 76 140 people live in the French part of the biosphere reserve (2000), whereas 160 000 inhabitants live in the German part (1991). Major ecosystem type in the TBR are the

temperate broadleaf forests or woodlands, and the major habitats and land cover types are in France - acid bogs, heathlands, sandy grasslands, pine woods on peatlands, wetlands, rocky outcrops and cliffs and in Germany – beech woods, vineyards, lakes with bogs, wet meadows, sandy grassland, rocky outcrops.

Administrative authorities are in France - Park Naturel Régional des Vosges du Nord and in Germany - Verein Naturpark Pfälzerwald.

Contact address for Germany: W. Dexheimer, Franz Hartmann Str. 9, D-67466 Lambrecht/Pfalz, Germany, tel.: (49.6325) 95520, fax: (49.6325) 955299, e-mail: w.dexheimer@pfaelzerwald.de, info@pfaelzerwald.de, web site: http://www.biosphere-vosges-pfaelzerwald.org/

Contact address for France: Jean-Claude Génot, Parc Naturel Régional des Vosges du Nord, 67290 La Petite Pierre, France, tel. : 03 88 01 49 67, fax: 03 88 01 49 60, e-mail: jc.genot@parc-vosges-nord.fr, web site: http://www.parc-vosges-nord.fr

5.8 LIST OF PLANNING DATA AND POSSIBLE DATA PROVIDERS

This is a tentative list of planning data and possible data providers, that has been completed during the first mission of the TA team and may be helpful for the future planning procedure.

Documents and Records of Ministry of Environment and Forestry (MoEF)

- Forest Management Plans (Scale: 1/10 000 and/or 1/25 000)
- Forest Typology Plan (Scale: 1/100 000 and/or 1/25 000)
- Natural Protection Status, (Scale: 1/100 000 and/or 1/25 000)
- Forest cadastre (1/2 500)
- Satellite photos , Orthophotos if available, of the Project Area (Scale: 1/10 000 and/or 1/25 000)
- Others

Documents and Records of Ministry of Agriculture and Rural Affairs (MoARA)

- Soil Condition Maps Plan (Scale: 1/100 000 and/or 1/25 000)
- Land-use Plans (Scale: 1/100 000 and/or 1/25 000)
- Others

Documents and Records of Kirklareli Governorship (KG)

- Kirklareli Governorship Briefing Files and Reports,
- Kirklareli Agricultural Master Plan
- Other documents of Governorship

Documents and Records of Ministry of Transportation (MoT)

- Layouts and Activity Records of Ports, Fishing Ports and Marinas
- Others

Documents and Records of State Statistical Institute (SIS)

- Population statistics
- Employment statistics
- GDNP statistics
- Pollution statistics i.e. water, air and available others

Documents and Records of Ministry of Resettlement and Public Works (MoRPW)

- Spatial Structure Plans Master Plan (Scale: 1/25 000)
- Settlements Master Plan (Scale: 1/5 000)

Documents and Records of State Hydraulic Works (DSI)

- Hydrological records,
- “Istranca Project Profiles of Istanbul Metropolitan Municipality Water Supply Projects”

Documents and Statistics of General Directorate of Meteorology (GDM)

- Climate statistics,
- Sea temperature statistics
- Similar others

Documents and Records of State Hydraulic Works (DSI)

- Hydrological records,
- “Istranca Project Profiles of Istanbul Metropolitan Municipality Water Supply Projects”

Documents and Statistics of General Directorate of Meteorology (GDM)

- Climate statistics,
- Sea temperature statistics
- Similar others

Documents and Records of Ministry of Culture and Tourism (MoCT)

- Tourist facilities statistics
- Status and Boundaries of Natural, Archeological and Urban Sites

Documents and Records of Ministry of Transportation (MoT)

- Layouts and Activity Records of Ports, Fishing Ports and Marinas
- Land-use maps,
- Similar Others,

Documents and Records of State Statistical Institute (SIS)

- Population statistics
- Employment statistics
- GDNP statistics

5.9 JOINT MISSION REPORT

Final Joint Mission Report from 19.12.2004 – 28.02.2005

MWH Experts: Markus Weidenbach, Nils Finn Munch-Petersen, Kiril Georgiev, Ahmet Saffet Atik

Sunday, 19.12.2004

19.30 TA Team meeting in Ankara

Monday, 20.12.2004

09.00 Preparation of Meetings

11.50 Meeting MWH Manager

12.00 Introduction of the TA Team Members

14.00 Kick-off meeting at the SPO with representatives of EC-Delegation, SPO, CFCU

Agreement on time schedule, deadlines and objectives

16.00 TA Team meeting at the MWH office

Tuesday, 21.12.2004

9.00 Work meeting of TA team at MWH office

13.00 Meeting with Directorate for National Parks, Ministry of Forestry

15.00 Meeting with Deputy General Manager, Ministry of Culture and Tourism and colleagues

Wednesday, 22.12.2004

9.00 Meeting at MWH

Sectoral planning, responsibilities, work strategies

Meeting with MWH manager

14.30 Meeting with a member of the Joint Technical Group from the General Directorate of Agricultural Research

17.00 Writing Reports, arranging appointments at MWH office

Thursday, 23.12.2004

09.00 – 13.00 Work meeting at MWH

Departure of foreign experts

Monday, 27.12. – 30.12.2004

Between 27th and 30th December Mr. Atik contacted following officials to acquire relevant project data:

- Mr. Halil Ibrahim Yilmaz, head of department of the Ministry of Agriculture and Rural Affairs and Mr. Gursel Küsek
- Mr. Ferhat Ozkan, head of the department of the General Directorate Tourism Planning at the Ministry of Culture and Tourism
- Mr. Hakan Erdem from Ministry of Environment and Forestry and Mr. Tunay Tatar.

Monday 03.01.2005

Travel to Istanbul by team members, stay at Allstar Florya Park Hotel. Discussion of travel plan.

Tuesday 04.01.2005

08.30-12.30 Travel by bus/taxi from Istanbul Florya to Kirklareli.

13.30 Meeting with Kirklareli CBC Coordinator.

14.30-19.00 “Round Table” Work Meeting (Metaplan Discussion) with Governor of Kirklareli, representatives of relevant departments, research institutes, the municipality and the Trakya University (list of participants and results are documented).

19.15 Round off meeting with Governor.

Stay at Bilgic Hotel, Kirklareli.

Wednesday 05.01.2004

08.30-10.00 Team meeting

10.00-11.00 Meeting with Deputy Director of Forestry, Kirklareli Region.

11.30-12.30 Travel to Dereköy with Director of Forestry.

12.30-13.30 Meeting with Head of Forestry, Dereköy District.

13.30 Ahmet Saffet Atik leaves for Ankara.

13.30 Travel to border and to Malko Tarnovo Bulgaria. Change of vehicle.

14.30-18.00 Meeting with Strandja Nature Park Directorate officials, and officials of Bourgas Regional Forestry Board, Directors of Regional Forestry, and Director of Gramatikovo Game Breeding Station.

Stay at Municipal Guesthouse Malko Tarnovo.

Thursday 06.01.2004

09.00-10.30 Meeting with officials from Malko Tarnovo Municipality: Deputy Mayor, Director of Urban Planning and Economic Activity and Deputy Director of Municipal Forests.

10.30-11.00 Visit to Malko Tarnovo Museum Complex with Deputy Mayor and Museum Director.

11.00-11.30 Travel to Kachul (Gramatikovo) Game Breeding Station.

11.30-14.00 Inspection of Station, meeting with Director of Gramatikovo Game Breeding Station.

14.00-15.30 Travel to Tsarevo.

15.30-17.00 Planned meeting with Mayor of Tsarevo cancelled.

17.00-18.45 Travel along Black Sea Coast to Sinemorets.

Stay at Domingo Hotel Complex, Sinemorets.

Friday 07.01.2004

07.00-07.45 Travel along coast to Rezovo. Visit to Bulgarian/Turkish border.

07.45-11.00 Travel Rezovo to Bourgas with stop in Sozopol.

11.00-13.00 Meeting with Deputy Regional Governor, Director of Regional Inspectorate of the Environment and Water, Director of Regional Department of Executive Agency of Fishing and Aquaculture and Director of the Bulgarian Society for the Protection of Birds, Bourgas Branch.

13.30-18.00 Meeting with Executive Director of the Bulgarian Biodiversity Foundation and Team Leader for the development of Strandja Nature Park Management Plan.

18.00-18.30 Travel to Sozpol

Stay at Zubanova Guest House.

Saturday 08.01.2004

10.00-10.30 Travel to Poda (wetland) Protected Area Nature Information Centre.

11.00-12.00 Travel via Mladezhko to Zvezdets Village.

12.00-13.00 Village visit.

13.00-13.30 Travel to Petrova Niva visitor site, Church, Monument and Museum.

13.30-14.00 Visit to Petrova Niva.

14.00-15.00 Travel to Brashlian Village.

15.00-16.30 Meeting with Head of Public Relations, Strandja Nature Park, tour of village, visits to private home-stay guest houses, visit to Church and School Museum.

16.30-19.00 Meeting with representatives of the Brashlian Society for the Protection of Nature and Historical Heritage.

Stay at Vasilevi Family Guest House.

Sunday 09.01.2004

08.30-13.00 Work meeting and reporting in Brashlian.

14.00-15.00 Travel to Bulgarian/Turkish Border. Change of vehicles. Met by Deputy Director of Forestry, Kirklareli Region.

15.00-17.00 Travel: Border to Kirklareli.

20.00-21.00 Meeting with Director of Forestry, Kirklareli

Stay at Kirklareli Forestry Headquarters

Monday 10.01.2004

06.00 Ahmet Saffet Atik arrives from Ankara.

09.00 Meeting wit Deputy Director of Kirklareli Forestry Headquarter

08.00 – 18.00 Team meeting and office work, completion and submission of inception report, organisation of collected data.

Stay at Kirklareli Forestry Headquarters.

Tuesday 11.01.2004

09.30-10.30 Travel to Vize.

10.30-11.45 Meeting with head of Forestry Office, Vize.

11.45-12.45 Travel to Kiyiköy Black Sea coastal village.

12.45-13.30 Meeting with head of Forestry Office, Kiyiköy

13.30-16.30 Visit to Kiyiköy village. Inspection of streets, traditional buildings, pensions, restaurant and fishing harbour. Meet local fishermen and restaurant owner.

16.30-18.15 visit to Kasatura Beach (forest protected area and tourism area)

18.15-20.00 Return to Kirklareli

Stay at Kirklareli Forestry Headquarters

Wednesday 12.01.2004

09.00-10.00 Team meeting

10.00-11.15 Meeting with Professor Hasan H. Tok, Trakya University

11.15-11.45 Travel to Köy Koop Kirklareli Birgili Agricultural Cooperative

11.45-12.30 Meeting with Cooperative director.

12.30-13.30 Travel to Demirköy

13.30-14.45 Meeting with staff of GEF-II Biodiversity and Natural Resource Management Project, Igneada, at Demirköy headquarters.

14.45-15.00 Travel to Igneada and Limanköy coastal town.

15.00-15.30 Meeting with Mayor of Igneada, agricultural representative and NGO representative.

15.30-17.30 Travel along southern beach, visit to lake and alluvial forests (Longoz). Visit to northern coast and village of Beendik close to border of Bulgaria.

17.30-20.30 Return to Igneada. Dinner with town representatives, round up meeting in Demirköy and return travel to Kirklareli.

Stay at Kirklareli Forestry Headquarters.

Thursday 13.01.2004

09.00-13.45 Office work.

09.00 Saffet Atik leaves for Ankara.

13.45-14.15 Travel to Kofcaz.

14.15-15.15 Meeting with Mayor of Kofcaz.

15.15-16.45 Visits, accompanied by Mayor of Kofcaz, to look-out point (relay station) with overview of forest, villages and Bulgarian border - drive through forest on forest roads with visit to public picnic ground.

17.00-17.15 Visit to Topchular village, meeting with Mayor of Topchular.

17.30 Visit to Terzidere village

18.30 Visit to Elmadjik village and return to Kirklareli.

Stay at Kirklareli Forestry Headquarters.

Friday 14.01.2005

09.00 – 20.00 Office work at Kirklareli Forestry Headquarters.

Stay at Kirklareli Forestry Headquarters.

Saturday 15.01.2005

09.30 – 20.00 Office work at Kirklareli Forestry Headquarters.

Stay at Kirklareli Forestry Headquarters.

Sunday 16.01.2005

09.30 - 20.00 Office work at Kirklareli Forestry Headquarters.

Stay at Kirklareli Forestry Headquarters.

Monday 17.01.2005

06.00 Saffet Atik arrives from Ankara

09.00 –20.00 Office work at Kirklareli Forestry Headquarters.

Stay at Kirklareli Forestry Headquarters.

Tuesday 18.01.2005

08.30 – 17.00 Office work at Kirklareli Forestry Headquarters.

Completion and submission of project fiche draft

Schedule planning for third mission

18.00 Markus Weidenbach and Kiril Georgiev leave for Istanbul, overnight in Istanbul.

21.00 Saffet Atik leaves for Ankara

Nils Munch-Petersen stays at Kirklareli Forestry Headquarters.

Individual Mission Report of Saffet Atik between 06.01.05 to 16.01.05

19.12.04 to 05.01.05 see joint mission report above

Thursday -January 6, 2005

01.30 am - Arrival to Ankara

08.00 –12.00 (medical care in Ankara)

13.00 -18.00 Briefing to State Planning Organization Office and office works

Friday - January 7, 2005

08.00 – 12.00 (medical care and second small surgery again in Numune Hospital in Ankara)

13.00 – 18.00 Visit to Ministry of Environment and Forestry, getting views of Mr. Hakan Baykal of GEF II Project of General Directorate of National Parks.

Sunday -January 9, 2005

21.00 pm - Departure from Ankara to Kirklareli

10.01.05 to 12.01.05 see joint mission report

Thursday - January 13, 2005

09.00 – 10.00 Travel from Kirklareli to Ankara (for control of surgery upon the request of hospital)

Friday - January 14, 2005

08.00-12.00 (Visit to hospital)

13.00 – 18.00 Preparation of Project Fiche in Ankara January 14, 2005

Saturday - January 15, 2005

08.00 -18.00 Preparation of Project Fiche in Ankara January 15, 2005

Sunday - January 16, 2004

08.00 -20.00 Preparation of Project Fiche in Ankara and

21.00 pm - Departure from Ankara to Kirklareli

17.01.05 to 18.01.05 see joint mission report

Wednesday 19.01.2005

Nils Petersen

09.00 - 11.00 Visit to Kirklareli Museum.

15.00 - 17.30 Travel to Igneada via Demirköy, with Mustafa Iscioplu, head of GEF-II environmental project.

17.30 - 18.30 Meeting with members of handicraft NGO, Nüket Gilenti and Ayse Kusky. Shown handicrafts produced in Igneada.

Stay at Gülten – Resmi Avci Guesthouse, Igneada.

Markus Weidenbach:

08.00 – 12.00 Reports and emails

14:00 departure to Germany

Kiril Georgiev:

08:00 Departure to Germany.

Saffet Atik:

Arrival to Ankara

Studies on Turkish Legislation on Protected Areas

Thursday 20.01.2005

Nils Finn Munch-Petersen:

10.00 - 11.00 Meeting with head of Igneada NGO, Orhan Uyanik.

Walk around Igneada town and beach.

Stay at Gülten – Resmi Avci Guesthouse, Igneada.

Friday 21.01.2005

Nils Finn Munch-Petersen:

Meeting with Mustafa Iscioplu.

Walk around Igneada town. Photographs of tourist facilities.

Stay at Gülten – Resmi Avci Guesthouse, Igneada.

Kiril Georgiev:

09.30 – 17.00 Arranging accommodation of the team and meetings in Sofia.

Saturday 22.01.2005

Nils Finn Munch-Petersen:

Meeting with Mustafa Iscioplu.

10.00 – 12.45 Visit to border to Bulgaria, stop at Begendik village.

14.00 - 15.00 Travel to Demirköy.

Stay at GEF-II Project headquarter Guesthouse.

Sunday 23.01.2005

Nils Finn Munch-Petersen:

Meetings with Mustafa Iscioplu, at GEF-II headquarters, Demirköy.

Stay at GEF-II Project headquarter Guesthouse.

Monday 24.01.2005

Nils Petersen

10.00 - 11.30 Travel by car from Demirköy to Forest Headquarters Kirklareli.

13.00 - 14.00 Travel by car from Kirklareli to Edirne Forestry Headquarters.

16.30 - 21.45 Travel by car from Edirne to Kapikule and by bus from Kapikule to Sofia.

Kiril Georgiev

09.30 – 17.00 Arranging accommodation of the team and meetings in Sofia.

Nils Petersen and Kiril Georgiev

21.45 Meeting at Sofia Bus Station.

22.00 Transfer to Bulgaria Grand Hotel.

Saffet Atik

09.30 – 18.00 Preparation for Interim Report and Studies for finalization draft of Turkish Fiche.

Tuesday 25.01.2005

Nils Petersen

Editing of notes. Reading of materials.

Stay at Bulgaria Grand Hotel.

Kiril Georgiev

09.30 – 17.00 Arranging accommodation of the team and meetings in Sofia.

Saffet Atik

09.30 – 18.00 Preparation for Interim Report and Studies for finalization Draft Turkish Fiche. Tele-conference with State Planning Organisation

Wednesday 26.01.2005

Kiril Georgiev and Nils Petersen

09.00 Meeting at Bulgaria Grand Hotel.

09.30 - 11.00 Meeting at Bulgarian Association for Alternative Tourism with Lubomir Popiordanov, chairman; Zoritsa Stavreva, Secretary and Rich Fromer, Adviser.

11.15 - 12.00 Meeting with Toma Belev, Chairman of the Bulgarian Park Association and Director of Vitosha Nature Park Directorate.

12.15 - 13.00 Visit to Ethnological Museum.

13.15 - 14.00 Visit to Natural History Museum.

Kiril Georgiev

15.00 – 17.00 Arranging meetings in Sofia.

Saffet Atik

09.30 – 18.00 Preparation for Interim Report and Studies for finalization draft of Turkish Fiche.

Thursday 27.01.2005

Nils Petersen:

Work at hotel. Downloading e-mails at internet café.

11.00 - 12.00 Visit to Royal Danish Embassy. Meeting with Consular Secretary, Carsten Christensen.

Reading of National Ecotourism Strategy and Action Plan for Bulgaria and materials from Bulgarian Association for Alternative Tourism.

Reading of materials from Vitosha Nature Park, and Bulgarian promotional materials in general.

Kiril Georgiev:

10.00 – 17.00 Arranging meetings in Sofia.

Kiril Georgiev and Saffet Atik

17.30 Meeting at the Sofia Airport.

19.00 Transfer to Bulgaria Grand Hotel.

Nils Petersen and Saffet Atik

20.00 - 21.30 Meeting with Saffet Atik

Stay at Bulgaria Grand Hotel.

Saffet Atik:

09.30 – 12.00 Preparation for Interim Report and Studies for finalization Draft Turkish Fiche.

12.00- 17.30 Travel from Ankara to Sophia

Friday 28.01.2005

Kiril Georgiev, Nils Petersen and Saffet Atik:

09.00 Meeting at Bulgaria Grand Hotel.

09.30 - 11.00 Meeting at Executive Environmental Agency. Lecture on Vitosha Nature Park and Bulgarian system of protected territories by Toma Belev, Director, Vitosha Nature Park.

11.00 - 11.30 Travel to Vitosha Nature Park Information Center.

11.30 - 12.30 Visits center and watches video on Park. Meets Stela Todorova, Head of Department, Regional Inspectorate of Environment and Water.

12.30 - 14.30 Visits to mini museums (Owl Museum and Bear Museum). Visits to area for use by disabled people (Iglikiny Poliani), arboretum circuit for disabled people and arboretum mainly for school/children's use.

14.30 - 15.00 Return to Sofia.

Kiril Georgiev:

15.00 – 17.30 Arranging transport to the project area.

Saturday 29.01.2005 (Team completes)

Nils Petersen & Saffet Atik:

09.00 – 17.00 Office work at hotel.

Kiril Georgiev:

11.30 – 15.00 Arranging transport to the project area.

15.00 – 17.00 Waiting for Markus Weidenbach at the airport.

Markus Weidenbach:

16:00 arrival in Sofia

18.00 - 21.00 Project team meeting.

Sunday 30.01.2005

10.00 Meeting at Bulgaria Grand Hotel.

10.30 - 11.00 Project team travel to Bulgarian Biodiversity Foundation

11.00 - 17.00 Meeting with Nada Tosheva, Programme Co-ordinator, and work at Bulgarian Biodiversity Foundation

Monday 31.01.2005

08.30 Meeting at Bulgaria Grand Hotel.

09.15 - 10.00 Team meeting and travel to Ministry of Regional Development and Public Works.

10.00 - 13.00 Meeting at Ministry of Regional Development and Public Works: Representatives of EC Delegation; Ministry of Environment and Water/National Nature Protection Service; Ministry of Agriculture and Forests/National Forestry Board and Executive Environmental Agency.

14.00 – 18.00 team meeting and arranging meetings in Sofia.

Tuesday 01.02.2005

09.00 Meeting at Bulgaria Grand Hotel.

10.00 - 11.30 Meeting with Simeon Marin, Project Co-ordinator, DANCEE funded Bulgarian Natura 2000 Network of Protected Zones, Ministry of Environment and Water.

11.30 - 12.30 Meeting with Ivaylo Zafirov, Senior Expert on Protected Areas, National Nature Protection Service/ Ministry of Environment and Water.

13.00 - 14.30 Meeting with Dr. Ana Petrova and Vladimir Vladimirov, Bulgarian Man and Biosphere Committee, Institute of Botany, Bulgarian Academy of Sciences.

14.30 - 14.45 Meeting with Professor Dimitar Peev, Director, Institute of Botany, Bulgarian Academy of Sciences.

Wednesday 02.02.2005

09.00 Meeting at Bulgaria Grand Hotel.

09.30 - 12.00 Meeting at Ministry of Agriculture and Forestry, Rural Development Directorate with: Milena Nikolova, expert in the Agroecology Department; and Snejana Kostadinova, National Co-ordinator, UNDP Agriculture and Rural Development Program for the Strandja -Sakar Region.

14.00 - 15.45 Meeting with Ivo Marinov, Director of Tourism Policy, Ministry of Economy and Tourism

Thursday 03.02.2005

Morning office work.

12.00 Departure Sofia.

16.00 Arrival Sokolitza, Karlovo Municipality.

Stay at Yaev Hotel, Sokolitza.

Friday 04.02.2005

08.45 Departure for Karlovo.

09.15-12.30 Meeting in Karlovo with Dr. Vet. Stoilko Apostolov, Manager, Bioselena Foundation for Organic Agriculture; and Boiko Stoyanov, Chairman, Association for Indigenous Breeds.

12.30 Attempt to travel onwards to Sozopol, first by direct route, then via Jambol. Luckily stopped by police and forbidden to travel onwards as more than 100 cars have been caught in a snowstorm coming from the Black Sea.

16.00 Arrival at Hotel Complex Chateau Alpia after digging the vehicle free from the snow.

Stay at Hotel Complex Chateau Alpia.

Saturday 05.02.2005

10.45 Departure from Sliven, after having received information that road to Burgas and Sozopol is open (all roads in Strandja Nature Park are however closed due to snow).

11.00 Visit to Sinite Kamuni Nature Park Information Centre (also closed).

16.00 Arrival in Sozopol.

Stay at Lozite Hotel, Sozopol.

Sunday 06.02.2005

09.00. - 21.00 Office work at Lozite Hotel, Sozopol.

Stay at Lozite Hotel.

Monday 07.02.2005

09.00 - 12.00 Office work at Lozite Hotel.

13.30 - 14.30 Travel to Bourgas.

15.00 - 19.00 Office work at Bourgas, Prestige Hotel.

Stay at Prestige Hotel.

Tuesday 08.02.2005

10.00 - 21.00 Office work at Prestige Hotel, Bourgas.

Stay at Prestige Hotel.

Wednesday 09.02.2005

09.00 - 20.00 Office work at Prestige Hotel, Bourgas.

12.30 – 13.30 Meeting with Stephan Peikov, GEOPAN International Commercial and Cultural Centre

Stay at Prestige Hotel.

Thursday 10.02.2005

09.00 - 12.30 Office work at Prestige Hotel, Bourgas.

13.30 Markus Weidenbach and Saffet leave for Sofia

Nils Petersen, Kiril Georgiev: Office work at Prestige Hotel, Bourgas.

Friday 11.02.2005

Markus Weidenbach, Saffet Atik:

08:00 – 12:00 work in Sofia

13:00 M. Weidenbach leaves for Germany

18:00 S. Atik leaves for Turkey

Nils Petersen, Kiril Georgiev:

09.00 - 18.00 Office work at Prestige Hotel, Bourgas.

Stay at Bulgaria Hotel, Sofia

Saturday 12.02.2005

Nils Petersen, Kiril Georgiev:

09.00 – 18.00 Office work at Prestige Hotel, Bourgas.

Stay at Prestige Hotel.

Sunday 13.02.2005

Nils Petersen, Kiril Georgiev:

09.00 – 18.00 Office work at Prestige Hotel, Bourgas.

Stay at Prestige Hotel.

Monday 14.02.2005

Nils Petersen, Kiril Georgiev:

09.00 - 18.00 Office work at Prestige Hotel, Bourgas.

Markus Weidenbach

08:00 – 17:00 office work in Germany, project correspondence, report completion, preparation of GIS data for the project region (Corine Landcover, ESRI world data, JRC Watershed data, SRTM Terrain models)

Tuesday 15.02.2005

Nils Petersen, Kiril Georgiev:

09.00 - 18.00 Office work at Prestige Hotel, Bourgas.

Visit to Bourgas Natural History Museum with display on Strandja Nature Park. Visit to Ethnographical Museum (Closed for renovation).

Stay at Prestige Hotel.

Markus Weidenbach

13:00 – 18:00 office work in Germany, revision of skeleton fiche considering SPO comments, studying new PHARE program guidelines, project correspondence.

Wednesday 16.02.2005

Nils Petersen, Kiril Georgiev:

12.30-21.00 Travel by bus from Bourgas to Istanbul.

Stay at Ambassador Hotel, Istanbul.

Markus Weidenbach

13:00 – 18:00 office work in Germany, preparation work for interim report and next mission, preparation of SPO meeting and agenda.

Thursday 17.02.2005

Nils Petersen, Kiril Georgiev:

13.00-20.00 Travel by bus from Istanbul to Ankara.

Stay at King Hotel Güvenlik, Ankara.

Friday 18.02.2005 (Team completes)

Nils Petersen, Kiril Georgiev, Saffet Atik:

09.00 Team meeting, office team work

Markus Weidenbach:

08:00 Travel to Ankara

19:30 Team Meeting in Ankara

Stay at King Hotel Güvenlik, Ankara.

Saturday 19.02.2005

09:00 – 19:00 Office team work

Stay at King Hotel Güvenlik, Ankara.

Sunday 20.02.2005

09:30 – 20:00 Office team work

Stay at King Hotel Güvenlik, Ankara.

Monday 21.02.2005

09:00 – 19:30 Office team work

10:00 – 12:00 Meeting M. Weidenbach, S. Atik with represesntatives from SPO, CFCU, EC Delegation and Ministry of Environent and Forestry at the SPO office (see minutes).

Stay at King Hotel Güvenlik, Ankara.

Tuesday 22.02.2005

09:00 – 20:30 Office team work

11:00 – 12:30 Meeting M. Weidenbach and N. Atar, MWH Office in Ankara

Stay at King Hotel Güvenlik, Ankara.

Wednesday 23.02.2005

09:00 – 19:00 Office team work in Ankara

14:00 – 16:30 Meeting M. Weidenbach, S. Atik with representatives from Minitry of Environment and Forestry and SPO at the Ministry of Environment and Forestry.

Stay at King Hotel Güvenlik, Ankara.

Thursday 24.02.2005

09:00 – 20:00 Office team work

Stay at King Hotel Güvenlik, Ankara.

Friday 25.02.2005

09:00 – 21:00 Office team work

Stay at King Hotel Güvenlik, Ankara.

Saturday 26.02.2005

10:00 – 20:00 Office team work

Stay at King Hotel Güvenlik, Ankara.

Sunday 27.02.2005

Markus Weidenbach:

08:30 – 17:30 Return to Germany

Nils Petersen, Kiril Georgiev:

10.00 – 17.00 Travel by bus from Ankara to Istanbul.

Stay at Ambassador Hotel, Istanbul.

Monday 28.02.2005

Nils Petersen, Kiril Georgiev:

Return to Denmark and Bulgaria

Markus Weidenbach

09.00 - 14.00 Office work in Germany, completion and submission of draft fiches.

5.10 PHOTOS

Figure 6: Kiyiköy Harbour

Figure 7:Landscape Scenery between Elmacik and Kofcaz

Figure 8:Wood Depot in Kofcaz

Figure 9:Mouth of River Veleka in the Strandja Nature Park nearby Sinemorets

Figure 10:Border River Rezovska/Rezve. View from Rezovo to Turkey. Location where a new pedestrian bridge is planned.