



REGIONAL ENVIRONMENTAL CENTER



# **Technical Task Team (TTT) for the collection, assessment and evaluation of national information in support of the Transboundary Diagnostic Analysis (TDA) and development of a Strategic Action Programme (SAP) in the Prespa Lakes Basin**

## **Inception Report**

Version: 1.1

Date: 15 December 2008

*The views expressed herein are those of the author(s) and do not necessarily reflect the official position of the United Nations Development Programme.*

## Table of Contents

<b>List of Abbreviations.....</b>	<b>4</b>
<b>1. Introduction .....</b>	<b>6</b>
1.1 Background .....	6
1.2 Objectives .....	8
1.3 Report structure .....	8
<b>2. Description of the area.....</b>	<b>10</b>
2.1 Institutions / Stakeholders .....	10
2.2 Geography .....	10
2.3 Climate .....	10
2.4 Vegetation .....	10
2.5 Fauna .....	11
2.6 Hydrology, Water Quality, and Hydrogeology .....	11
2.7 Demography and Economy .....	13
2.8 Municipal water and waste Infrastructure .....	15
2.9 Protected areas .....	15
<b>3. Key stresses in the Prespa Park .....</b>	<b>17</b>
<b>4. Approach .....</b>	<b>19</b>
4.1 TDA .....	19
4.2 SAP .....	23
4.3 Work Programme .....	26
4.4 Phase 0: Inception .....	26
4.5 Phase 1: TDA .....	27
4.6 Phase 2: SAP .....	27
4.7 Time schedule .....	28
4.8 Data Collection Method .....	29
4.9 Identified sources of information .....	29
4.10 Resource Plan .....	36
4.11 Tasks and Time Schedule for Local Consultants .....	41
<b>5. Risks and their mitigation.....</b>	<b>48</b>

## Annexes:

- Annex 1 Main Stresses in the PP ecosystem
- Annex 2 Proposed outline for National Reports
- Annex 3 list of Relevant Data Sources
- Annex 4 Preliminary Agenda for National Reports
- Annex 5 List of participants for the National Workshops

## List of tables

Table 1:	Project phases and Milestones
Table 2:	Time schedule and missions of international consultants
Table 3:	Indicative Missions for Manfred W. Buch (Team Leader and specialist in botany and soil science)
Table 4:	Dimos Anastasiou (Forestry Specialist and Environmental Scientist / GIS Expert)
Table 5:	Magdolina Toth Nagy (Specialist on implementing the EU law in the water management and implementation of the Aarhus Convention)
Table 6:	Indicative task description for Ana Petrovska (expert on land use and spatial planning)
Table 8:	Indicative task description for Dragana Ilijevska (expert on water management)
Table 9:	Indicative task description for Eduard Cani (expert on ecosystem management and biodiversity)
Table 10:	Risks and their mitigation

## List of Abbreviations

<b>AL</b>	Albania
<b>APR</b>	Annual Project Review
<b>BD2</b>	GEF Biodiversity Strategic Priority #2.
<b>CARDS</b>	EU Program for Balkan Countries, "Community Assistance for Reconstruction, Development and Stabilisation
<b>CBD</b>	Convention on Biological Diversity
<b>CBO</b>	Community-based Organization
<b>CBNRM</b>	Community-based Natural Resource Management
<b>CEPA</b>	Communication, Education and Public Awareness (Ramsar Convention Program)
<b>CO</b>	Country Office (UNDP)
<b>DEX</b>	Direct Execution
<b>DI</b>	Designated Institution
<b>DBC</b>	Drainage Basin Councils
<b>DoF</b>	Department of Fisheries (AL)
<b>BSAP</b>	Biodiversity Strategy and Action Plan for RM
<b>CDM</b>	Clean Development Mechanism
<b>EC</b>	European Commission
<b>EAR</b>	European Agency for Reconstruction
<b>EE</b>	Energy Efficiency
<b>EEA</b>	European Environmental Agency
<b>EIA</b>	Environmental Impact Assessment
<b>EIONET</b>	European Information and Observation Network
<b>EU</b>	European Union
<b>ENR</b>	Ezerani Nature Reserve
<b>EoY</b>	End of Year
<b>ESA</b>	Ecological Stress Analysis
<b>ES</b>	Executive Secretary
<b>FIS</b>	Fishery Inspection Service
<b>GEF</b>	Global Environment Facility
<b>GDP</b>	Gross Domestic Product
<b>GIS</b>	Geographic Information System
<b>GNP</b>	Galicica National Park (FYR of Macedonia)
<b>GR</b>	Greece
<b>GR-MoFA</b>	Greek Ministry of Foreign Affairs
<b>IC</b>	Incremental Cost
<b>IPA</b>	Instrument for Pre-Accession
<b>IPPC</b>	Integrated Pollution Prevention and Control
<b>IFI</b>	International Finance Institutions
<b>LSG</b>	Local Self Government
<b>IEM</b>	Integrated Ecosystem Management
<b>IR</b>	Inception Report
<b>IUCN</b>	World Conservation Union
<b>IW</b>	Inception Workshop
<b>KfW</b>	Development Bank – Financial Cooperation from the German Federal Government
<b>LPA</b>	Law on Protected Areas
<b>LEAP</b>	Local Environmental Action Plan
<b>MK</b>	FYR of Macedonia
<b>GR-MoEPP</b>	Greek Ministry of Environment and Physical Planning

<b>MoEPP</b>	Ministry of Environment and Physical Planning (for FYR of Macedonia)
<b>MoEFWM</b>	Ministry of Environment, Forestry, and Water Management
<b>MoR</b>	Municipality of Resen
<b>MCWG</b>	Monitoring and Conservation Working Group
<b>NATO</b>	North Atlantic Treaty Organization
<b>NTFP</b>	Non-timber forest products
<b>NWC</b>	National Water Council
<b>NGO</b>	Non-governmental Organization
<b>NSEA (MK)</b>	National Strategy on Environmental Approximation
<b>OP</b>	Operational Program
<b>PA</b>	Protected Area
<b>PEC</b>	Project Enabling Committees
<b>PIR</b>	Project Implementation Review
<b>PMU</b>	Project Management Unit
<b>PNP</b>	Prespa National Park (Albania)
<b>POC</b>	Project Oversight Committee
<b>PPCC</b>	Prespa Park Coordination Committee
<b>REC</b>	Regional Environmental Centre
<b>SEA</b>	Strategic environmental assessment
<b>SDC</b>	Swiss Agency for Development and Cooperation
<b>ToR</b>	Terms of Reference
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>WFD</b>	Water Framework Directive
<b>ZELS</b>	Association of the Units of Local-Self Government

## 1. Introduction

The socio-economic conditions in the Prespa Lakes basin are not uniform, it can be stated that the economic development of the Prespa region is full of contrast: the lowest income rate is found in Albania (700\$ per capita), higher is in FYR of Macedonia (2000\$ per capita) and substantially higher is in Greece (10 000\$); However, challenges for integrated water resources and ecosystem management are fairly common.

Management of the shared water bodies such as the Prespa Lake is largely subject to the legal and regulatory frameworks and institutional settings of the littoral countries. The policies and legal and institutional frameworks in Albania and FYR of Macedonia are under an on-going (European Union) approximation process, at differing stages of completion. The EU Water Framework Directive (WFD) is a key driving force with respect to the Prespa Lakes management. Greece, as an EU member has to be compliant on the legislation, regulation and implementation side with the WFD; the Greek Law 3199/2003 is the local directive for the WFD implementation, along with other relevant regulations and restructuring of the national and regional water management.

Transboundary cooperation for the management of the shared water body is in place through a functional Prespa Park Coordination Committee. It is undergoing a process of building its capacities towards taking over a transboundary integrated management of the Prespa Lakes watershed. A Transboundary Diagnostic Analysis will be carried out to identify key transboundary stresses over the ecosystem including their causes, while a Strategic Action Programme will address these by defining comprehensive and agreed measures.

### 1.1 Background

The Prespa region, combining the two Prespa Lakes (Mikri and Macro) and their catchment basin, is shared by Albania, Greece and the FYR of FYR of Macedonia. The international ecological significance of the area, and especially the need for sustainable water management for the benefit of both nature and the inhabitants, led to the establishment of the Prespa Park – the first transboundary protected area in the Balkans – with a Joint Declaration of the Prime Ministers of the three littoral countries, in February 2000. Following the Declaration, an interim joint body, the Prespa Park Coordination Committee (PPCC), was established by the three Governments, for the coordination of planning and implementing activities in the region. The PPCC is a non-legal entity that consists of representatives of the Ministries of Environment, the local Municipalities and the NGO community of each state, as well as a permanent MedWet / Ramsar observer. The PPCC holds regular meetings (twice a year) and is supported by a trilateral Secretariat consisting of three officers from the collaborating NGOs.

The completion of the Strategic Action Plan (SAP) for the Sustainable Development of the Prespa Park, in 2001, has been one of the main early accomplishments of the PPCC. The SAP lays down a joint vision for the transboundary protected area, identifies the main management issues and aims to guide future activities in Prespa. Reasons to the under implementation of the SAP are various; ranging from the lack of funds, inadequate capacity of institutions - to the SAP content itself in which the envisaged measures are not distinguished by their national and transboundary character, nor are they listed by order of priority.

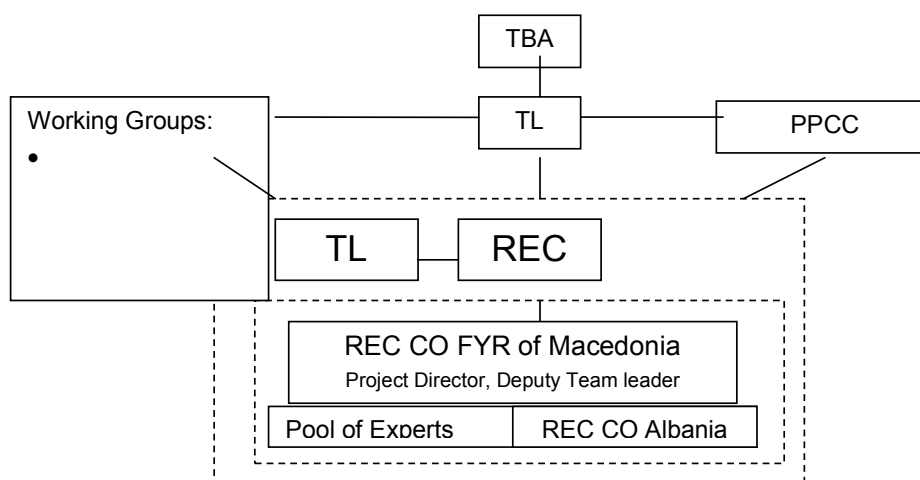
Divergent perceptions on the causes of environmental problems in the basin are slowly converging through time, discussions and joint studies are carried out in the region in diverse transboundary ecosystem management fields. Indeed, at the PPCC level consensus is reached among the stakeholders on the necessity of special cooperation on water management on the basis of Directive 2000/60/EC (EU WFD). This is of great significance taking into consideration that two of the three countries sharing the basin are not – as yet – EU member states. The Water Framework Directive is implemented in Greece through local legislation and regulation framework, and where gaps exist, actions are under development for the compliance with WFD. Thus, any activity undertaken, (such as the Regional Spatial Plans, Regional Solid Waste Management Plans, etc) has to comply with this regulatory framework.

Within the framework of this transboundary GEF project, the three States have committed to jointly developing a Strategic Action Programme for the Prespa Lakes Basin. A trans-boundary diagnostic analysis (TDA)<sup>1</sup> is an important tool/approach that GEF has adopted towards the development of a Strategic Action Programme (SAP)<sup>2</sup>.

The REC has been appointed as an international Technical Task Team (TTT) to support the development of a Transboundary Diagnostic Analysis (TDA) and a Strategic Action Programme (SAP). It will support the Task Leader by updating national data on the Prespa Basin and in providing expert assistance in supporting the identification of relevant environmental quality objectives, costing means to achieve these objectives and in preparing an outline financing plan.

In the following Figure the management / operational structure of the project is given.

Figure 1: Project Management and operational structure



---

<sup>1</sup> A GEF Transboundary Diagnostic Analysis (TDA) is a scientific / technical fact-finding analysis to scale relative importance of sources, causes and impacts of pressures in the basin. The TDA is intended to present the facts associated with the problems facing the basin and the pressures and stresses on the ecosystem.

<sup>2</sup> A GEF Strategic Action Programme (SAP) is a negotiated policy document that identifies policy, legal and institutional reforms, and investment needs to mitigate the stresses on the ecosystem.

As it can be seen in the Figure, the REC consists of teams providing one person from the Head Quarters and experts from the Country Offices in FYR of Macedonia (Project Director and Deputy Team Leader) as well as CO Albania (two experts participating in the pool of experts). In the pool three external experts are involved too-two from FYR of Macedonia and one from Greece. In addition, an International team leader is being appointed to oversee the work of all team members, either REC or external. The REC's overall responsibility in conjunction with other team members lays within the boundaries of data collection throughout the process from various official and unofficial sources. More details on the data sources and the data collection process itself are given in chapter 4.

The TTT shall be closely linked to, and integrated with, the activities and the expertise within the transboundary Prespa Monitoring and Conservation Working Group (MCWG). The technical reports produced under this project component have been delivered to the TTT. It shall consider the Transboundary (TB) priority parameters to be selected for monitoring as a basis for identification of key stresses, to which the Environmental Quality objectives along with measures to achieve these will be linked.

Apart from communicating closely with the MCWG, the TTT shall maintain close contact and co-ordinate with both national components (in Albania and FYR of FYR of Macedonia) of the UNDP/GEF Prespa Regional Project and the Greek focal point. Most of reports produced under the national project components have been made available to the TTT. It shall closely observe the progress of activities relating to cross cutting issues (such as the spatial planning/land use), and agriculture, forestry, fisheries, as well as habitat conservation related activities being undertaken by the trans-boundary component.

## 1.2 Objectives

The UNDP/GEF Prespa Park project's overall objective is to contribute to improving the health of the Prespa Basin ecosystem, through transboundary consensus and effective trans-boundary action, thus improving the ability and enabling commitment of each littoral country to effect change within their respective national sectors of the Prespa Lakes basin.

The project specific objectives are as follows:

- Identify the immediate, intermediate and fundamental causes of priority stresses over the ecosystem of the Prespa Park. The identification of causes will specify practices, sources and whenever possible locations and human activity sectors from which environmental degradation arises or is threatened.
- Identify, quantify, and set priorities for the environmental concerns that are transboundary in nature, and
- Define realistic and feasible measures to prevent / mitigate priority ecosystem stresses satisfying the citizen's demands and meeting, as much as possible, both-the development and environmental objectives

## 1.3 Report structure

Chapter 2 highlights on the present situation (excerpts from the existing SAP and other sources);

Chapter 3 discusses the key stresses of the Prespa Park and the way how the TTT intends to segregate them into a number of sectors, as per the available expertise in the TTT.



Chapter 4 brings forward the Consultants approach in view of GEF/IW Learn guidance and the project ToR. The approach is reflected in the resource and work plan including also individual ToRs for the team members.

Chapter 5 highlights Risks and envisaged strategies for their mitigation.

## 2. Description of the area

### 2.1 Institutions / Stakeholders

The principle stakeholders in three littoral countries are their respective Ministries which are in charge of the environment. In Albania this is the Ministry of Environment, Forests and Water Administration (MoEFWA), [www.moe.gov.al](http://www.moe.gov.al); it proposes measures for the protection and preservation of the environment, forestry and water resources and is responsible for the implementation of water and forestry related policies. In Greece, Ministry of Environment, Spatial Planning and Public Works ([www.minenv.gr](http://www.minenv.gr)) and its regional offices are in charge of Prespa Park TB issues. In FYR of Macedonia the ultimate beneficiary of the Prespa Park UNDP/GEF project is the Ministry of Environment and Physical planning ([www.moepp.gov.mk](http://www.moepp.gov.mk).) It leads the approximation efforts toward aligning with the EU water related policy.

There are regional authorities in Albania and Greece – the regional council of Korca and the prefecture of Florina. Municipalities in the transboundary area that belong to the geographical scope of the Prespa park are the municipality of Resen (MK), Municipality of Prespa (GR) and municipalities of Liqenas, Proger and Qender Bilisht (AL).

Other related stakeholders which the TTT shall involve in the process are the NGOs and representatives of the private sector, such as the associations of fishermen, associations of agricultural producers, forest companies, management bodies of protected areas etc.

### 2.2 Geography

Prespa is a transboundary area shared by Albania, Greece, and the FYR of FYR of Macedonia. It is a high-altitude basin consisting of two interconnected lakes, Micri Prespa (47.4 km<sup>2</sup>) and Macro Prespa (259.4 km<sup>2</sup>), which are located at approximately 850m asl and surrounded by forested mountain regions. The most prominent mountains are: to the East, Mt. Pelister (2,601 m) in the FYR of Macedonia and Mt. Varnous (2,334 m) in Greece; to the West, Mt. Mali i Thate (2,288 m) and Mt. Galichitsa (2,254 m) in Albania and the FYR of FYR of Macedonia, respectively, and to the Southeast, Mt. Sfika or Triklarion (1,749 m), in Greece. The catchment area of the two lakes is 2,519.1 km<sup>2</sup>; it is anticipated as the project region, however, the borders will extend to encompass the protected areas (National parks) upon the analyses of the forest habitats and ecosystem / biodiversity.

### 2.3 Climate

The climate of the Prespa Lake area is mild continental-central European with Mediterranean features. The average annual precipitation ranges between 600 and 900mm, and the wet season lasts from October to May, but in higher ground conditions are generally wetter. Snowfall is common from October until April. Wind velocities are low throughout the year.

### 2.4 Vegetation

The successive vegetation zones from the lakeshores to the mountain summits are: forest formations (lowland woodland, deciduous oak, beech, and mixed beech-fir forests), sub-alpine vegetation of dwarf shrubs, and alpine meadows. Apart from the aforementioned forest formations, a considerable part of the catchment is occupied by reed beds, farmland, and

human settlements. More specifically, extensive reed beds can be found in parts of the Micri Prespa lakeshore, and much less so in Macro Prespa; farmland and settlements occupy the lower and more level parts of the Prespa basin, situated mainly in the FYR of FYR of Macedonia, and to a lesser extent in parts of the Albanian and Greek catchment.

Forests in the Albanian part of Prespa consist primarily of oak (63%) and beech (15%). Illegal logging for the collection of firewood, tree lopping for the collection of winter fodder, and overgrazing of subalpine and alpine meadows seriously threaten these forests, and most of them have deteriorated into unproductive shrub. Furthermore, during the years 1998-1992 some 270 ha were afforested with pines *Pinus nigra* and *Pinus sylvestris*, species not indigenous to the area. According to the Prespa Park Strategic Action Plan (SAP), there is need for a forestry development and management plan and a sustainable forestry system. In Greek Prespa, there are six forest complexes covering 17,422 ha, managed either as coppice or as spermophytic forests. An estimated 3% of the inhabitants are occupied in forestry. In general, fully or partially forested areas cover 60.6% of the region.

## 2.5 Fauna

- Invertebrates: 16 endemic species have been registered.
- Fish fauna: A total of 23 fish species have been recorded, out of which 5 are endemic to Prespa and 2 are endemic to the Balkans.
- Amphibians: 11 amphibian species have been recorded. Two species and four subspecies are considered Balkan endemics. None of the amphibian species is directly threatened.
- Reptiles: 22 reptile species have been recorded.
- Birds: The avifauna of Prespa has both national and international importance, due to its richness but also due to the presence of significant populations of rare species of international importance, such as such as the Dalmatian pelican, the White pelican, and the Pygmy cormorant.
- From the 261 bird species that have been observed in the Greek part of the area, 183 are important, according to official catalogues, national or EC legislation and international conventions. No detailed study to gather qualitative and quantitative data has been undertaken so far in Albania and the FYR of FYR of Macedonia.
- Mammals: Among the mammals encountered in Prespa, four are in need of immediate conservation measures: the wolf, the brown bear, the otter and the chamois.

## 2.6 Hydrology, Water Quality, and Hydrogeology

The Prespa catchment area includes two lakes: Mikri and Macro Prespa, and permanent or seasonal streams, which discharge into the two lakes. The major Contributing waters to Macro Prespa Lake are Golema Reka, Brajcinska Reka and Kranska Reka in FYR of Macedonia and Aghios Germanos River in Greece. There is no major source of surface water input from Albania to Mikri Prespa.

Specifics of Macro Prespa Lake are that water from this lake runs into Ohrid Lake through underground flows and appears at Ohrid Lake coast and bottom of the lake. There were average oscillations of the water level of Macro Prespa Lake in the period 1961-1986, from when the water level started drastically to drop-down. For Prespa Lake-Stenje, analyses of registered water levels for the period 1951-2000 show negative trends. Maximum levels  $H_{max} = 415$  cm have been registered in 1963, then  $H_{max} = 88$  cm in 1978,  $H_{max} = 241$  cm in 1986, after which pulling of the water from the coast started with water levels of  $H_{max} = -300$  cm in

1995 and Hmax = -175 cm in 2000. Average and minimum levels follow the same descending trend. Absolute annual minimum of the water level of -445 cm, occurred in 2002. Insignificant increasing of characteristic water levels has been noticed in 2003. According to the water balances (KfW Feasibility Study Project Preparation & Development of the Transboundary Prespa Park Project, Part V-Hydrology Report, 2005) it has been stated that the water level fluctuations of the Macro Prespa Lake are predominantly related to natural variations in rainfall, rather than human extractions and variations in the “karstic outflow” regime.

Inadequate land and water use planning and management are present in both Albania and FYR of Macedonia, having resulted in a degraded shoreline, wetland and river beds.<sup>3</sup>

Unlike the Macro Prespa, Mikri Prespa has a surface outflow. Water flows from Mikri to Macro Prespa through a sluice-gate controlled channel at the Koula location in Greece.

The hydrology of the two lakes is complex. For a complete interpretation of the observed phenomena and management of the water regime a comprehensive study of the hydrogeology of the region is deemed necessary. Basic data are being observed in previous studies (KfW study **Project Preparation & Development of the Transboundary Prespa Park Project, Part V Hydrology Report, 2005**); presently several experts are being engaged to prepare the hydrological balance in the catchment and the TTT shall strive to create links with this ongoing activity.

The absence of long-term, systematic water quality measurements is characteristic for the area, all the existing data concern limited duration sampling, while the analyses are usually carried out using different methods. Therefore, the results of any analysis must generally be treated with a certain reservation.

The water quality of the lake is still good, and suited for drinking without purification. The water quantity is dropping through an ever diminishing input (less precipitation in the past years) and extensive irrigation (Crop production in Greece and water abstraction in Albania). The level of the water surface dropped by around 5 m (maximum drop was 7 m) over the last 40 years.<sup>4</sup>

The lake water quality is deteriorating and showing signs of eutrophication expressed by Oxygen depletion in lower layers of the lake. This phenomenon is reversible and related to a number of natural and antropogenic factors that affect the lake water quality. Among the factors that affect the lake most is the presence of nutrients, mainly nitrogen and phosphorous, which trigger a sequence of biological growth in the lake. The organisms consume oxygen that, in limited quantities, is brought into the lake by atmospheric exchange.

Generally, the presence of nitrogen is more relevant in flowing water while it is the phosphorous that constitutes the growth limiting factor in stagnant waters (lakes). A rough estimation of Ptotal entering the environment (soil and surface waters) has revealed that agriculture contributes significantly to the P-input into the natural ambient of the FYR of Macedonian side of Prespa Lake.

---

<sup>3</sup> The European Environment Agency, and specifically the Waterbase Database for lakes provides quality, quantity, pressures and other policy related data for Mikri and Macro Prespa Lakes: <http://dataservice.eea.europa.eu/dataservice/metadetails.asp?id=1039> The database does not provide the depth for the lakes of interest.

<sup>4</sup> Report Environmental Assessment, Environmental Protection of Lake Prespa, Feasibility Study, 2001 (KfW)

The discharge of raw wastewater originating from Resen and industries located nearby into surface water has to be mentioned as the most important point source that contributes to water quality deterioration.

The measurements in general show the Lake Prespa in mesotrophic condition (mean total phosphorus concentration around 20 mg/m<sup>3</sup>), measurements during autumn revealed significantly higher concentrations in deeper levels of the lake (concentration reaching 65 mg/m<sup>3</sup> at a depth of 18 m). The increased phosphorus content could be caused by an increased runoff/ wash-out of fertilizers from the cultivated land around Lake Prespa.

Man-induced soil erosion from cultivated land brings particulate phosphorous which normally is not readily available for algae growth, but may become so over a longer period of time.

## 2.7 Demography and Economy

The area is sparsely populated, with ca. 24,000 inhabitants in all three countries. The vast majority of the population resides near the lakeshore. The inhabitants are mainly occupied in the primary sector of the economy; the tertiary sector is expected to increase in significance in the coming years.

### **Primary Sector - Agriculture:**

In the Greek Prespa almost half of the families (48%) generate their income in agriculture. Steady increase in bean cultivation being observed in the past has recently started to suffer from competitive pressure; vegetable and tree cultivation is constant, while cereal cultivation shows a decrease. Land use in this sector is characterized by small individual parcels and relatively low structural diversity; significant deficiencies in marketing and processing are observed. The quantities of fertilizers and pesticides used in the Greek Prespa is linked to the growing of beans as a dominant crop: the intensity of fertilization will be analyzed in the next stages using available statistical data<sup>5</sup>, aiming to reveal if this practice may cause impacts over the lakes ecosystem.

In the Albanian Prespa the main economic activity of the primary sector is agriculture. Only 2.1% of the arable land is irrigated (in 1985 the percentage was 54%) due to the destruction of the infrastructure. Productivity remains low due to minimal mechanization, leading to low incomes for the farmers. Fertilizers are not used in the region, which indicates its potential for organic farming.

In the FYR of FYR of Macedonia, the most important agricultural sector is fruit growing (the apple being the most dominant) and cereals. Almost all of the agricultural land (91%) is privately owned; the use of fertilisers is rather intensive. This is to be confirmed via analyzing data to be collected in the course of the UNDP/GEF national project on Reducing Environmental Impacts of Agriculture in the Prespa Region”.

Stockbreeding: On the Greek side, about 33.5% of the labour force is involved in animal husbandry, especially sheep and goat breeding. Recently, a revival of cattle breeding has been observed, as a secondary occupation. All stockbreeding sectors, however, face several problems and deficiencies. In the Albanian Prespa, stockbreeding is recently taking a priority as

---

<sup>5</sup> Statistical Agency of Greece is regarded a source for data to determine the intensity/magnitude of various impacts / stresses of the ecosystem

well. Cattle breeding in the FYR of FYR of Macedonia do not represent a significant economic activity and covers only the needs of the local population.

**Fishing:** The number of fishermen has been steadily decreasing. In the Greek Prespa, approximately 13% of the labour force is involved in fishing. Since 1960, fish production is steadily decreasing, due to over-fishing and overgrowth of the reed beds, as well as a decline in the number of fishermen. A fishing association has been established in the area of Liqenas. Currently around 65 fisherman members of this association have obtained the required license. Fishing with dynamite is still ongoing, although it has drastically decreased since 2000. The fishing activities are dependant on day-by-day market needs due to the lack of processing facilities. The commercial fishery focuses on 5 main species, out of which Carp and Bleak are the most appreciated. In both Albania and FYR of FYR of Macedonia, although there is lack of statistical data on fish yield and fisheries, a decrease in fishing is observed.

**Forestry:** Although forestry constitutes an active industry in the Greek Prespa, only 3% of the labour force is occupied in the sector with a very low contribution to their income. Fully forested and partially forested areas cover 60.6% of the land area in the Prespa park region. On the Albanian side, most local forests have in the past been degraded for the production of fire wood and the collection of winter fodder, mostly for goats. Another threat is the overgrazing of sub-alpine and alpine meadows. Reforestations that took place in Albania during the years 1988-1992 used alien species. In the part of Prespa belonging to the FYR of FYR of Macedonia, forests are managed by "Prespa Drvo", which is a regional unit of the central public enterprise for management of forests, "Makedonski Sumi." Prespa Drvo manages approximately 494 ha of coniferous forest, 13,000 ha of tall-trunked forest and 7,000 ha of small trunked forest, occupying 75 workers. Forest management policy in the FYR of FYR of Macedonia promotes sustainable management and combats illegal harvesting. Currently, there is a need for additional measures for combating illegal logging and for the afforestation of degraded forest areas.

**Mining:** There are no active mines in the Albanian and the Greek Prespa area, whereas in the FYR of FYR of Macedonia six lime factories and a quarry of syenite operate covering local needs.

### ***The Secondary Sector***

In the Greek Prespa a few processing units and a marble-processing industry operated during the years 1969-1992, albeit with no great success. Nowadays, only a few fur workshops operate in the Greek Prespa, organised as family businesses and employing about 25 people. There are no secondary sector activities in the Albanian Prespa. In the FYR of FYR of Macedonia, 2500 to 3000 persons are employed in various enterprises, which, however, face economic problems. The various industries of this sector create considerable pollution and are in need of specific investments for their overall modernization. Examples of such Companies are as follows: Agrolod, Prespateks, Algreta, Proimpeks, Prespaplast etc.

### ***The Tertiary Sector***

In the Greek Prespa, the tertiary sector occupies around 16% of the active labour force. Commercial activities in the study region have created a very rudimentary infrastructure in order to meet the basic needs of the local community. Services offered in the Greek Prespa mainly relate to recreation and tourism and demonstrate a steady increase. The tourist period lasts from June to September and the majority of visitors are young Greeks. The Prespa region has several significant cultural and natural features, archaeological sites and monuments, small

traditional villages and sites of special ecological interest. However, the tourist attractions of Prespa remain relatively under-exploited, unknown and in a bad condition. Hence, promotion of conventional or alternative tourism seems to be essential for the economic development of the region and the preservation of its historical, cultural and ecological identity. In the FYR of FYR of Macedonia, there is an expected increase in tourism over the next 20 years, which, however, is also mostly seasonal. In Albania, the tourism sector is almost non-existent, due to unfavourable economic conditions and lack of necessary infrastructure. Local development plans in Albania show an increased interest in the development of rural tourism.

## 2.8 Municipal water and waste Infrastructure

Generally it has to be stated that the water supply level and the sanitary infrastructure is well developed in the municipality of Resen (FYR of Macedonian part), but showing some deficiencies as far as operation is concerned. Most of the population is supplied with water of an acceptable quality and only a few “hot spots” in the sense of low sanitation level were observed. Deficits of the source become evident in the dry season requiring additional support thus generating increased operation costs. The area of Prespa in the Albanian part stands on a massive limestone rock. In the entire area lying at the foot of the Mali i Thate, natural water springs are a rare incidence. Drying out of a number of drinking water sources in this area is evident. Only Lajthiza village is supplied with drinking water by a spring. All the other villages are supplied with drinking water by the Lake. Water is pumped into reservoirs placed on dominating heights above the villages from where it is distributed through pipes to the households. Due to the rapid decline of the water level in the lake, pumping the water up is hampered as the capacity of the existing pumps does not allow for the extension of the existing pipes. This phenomenon has prompted the local people to drill in greater depths for new water sources. The risk of biological contamination of waters abstracted for drinking water purposes is obvious. Total Coliforms and E.Coli are present (28 col/100ml) according to the biological analyses conducted by the Public Health Institute of Korca, thus the present water supply system is in urgent need for improvement.

The collection system for wastewater covers almost all of the municipality of Resen with a connection rate of about 80%. Treatment facilities for collected wastewater are existing in a high number in the project area; these facilities have been, whether designed for communal wastewater or installed in smaller units in hotels or industries, not functional in majority of cases. The individual collection and treatment facilities do not satisfy accepted technical standards. In Albania, only two the villages in the area, Liqenas and Zaroshka, are equipped with modern and up to date sewage systems.

As for the waste management the situation is not in favour of maintaining the ecosystem health; in FYR of Macedonia an organized waste collection system is available to citizens and industries while in Albania local population is left to handle their wastes on their own. Disposal of wastes remains a problem in both countries.

## 2.9 Protected areas

Prespa area is protected through the following:

### *In Albania:*

- “Prespa National Park” (PNP), with a total surface of 27,750ha

### *In Greece:*



- "Prespa National Forest" (PNF), of 19,470ha - the largest of the 10 National Forests established in the country;
- Micri Prespa is a designated Special Protection Area (SPA) as an Area Important for Birds pursuant to Directive 79/409/EEC on the protection of birds.
- Two Special Areas of Conservation (SAC) - the PNF and the Varnountas Mountain are protected under Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna (the Habitats/ NATURA 2000 Directive),
- Greek Prespa falls under the Ramsar Convention on Wetlands (ratified by Law 191/1974), since Micri Prespa is designated as one of the Greek Ramsar sites (wetlands of international importance).

***In the FYR of FYR of Macedonia:***

- Strictly Protected Ornithological Reserve "Ezerani" (area: 2,080ha);
- National Park of "Pelister" (area: 12,500ha);
- National Park of "Galichitsa". (area: 22,750ha);
- Monument of Nature "Lake Prespa";
- Reserves of Fir (*Abies alba*), Birch (*Betula verrucosa*) and Beech (*Fagus moesiaca*) on the slopes of Pelister Mountain (in areas of 7.6ha, 8.7ha and 5ha respectively);
- Several species of the flora and fauna of Prespa in all three countries are included in the Annexes of the Bern Convention on the Conservation of European Wildlife and Natural Habitats, but no specific protection measures, as instructed by the Convention, have been taken;
- Six areas of controlled hunting;
- Special Housing Zones, three Industrial Zones, and six Tourist and Recreation Zones.



### 3. Key stresses in the Prespa Park

The following key stresses over the Prespa Park eco-system have been recognized throughout the UNDP project:

1. **Land-use management**
2. **Water management**
3. **Agriculture**
4. **Fisheries**
5. **Forest management**
6. **Liquid Waste Management**
7. **Natural Cycles**

The TTT started the analyses concerning the relevance of these identified main sectors / stresses and decided to initiate revision towards their formulation in view of the following arguments:

- Main ecosystem and land use management related deficiencies originate from inadequate capacity of institutions, their organizational set up and inappropriate management of human resources; in addition, low awareness of both the stakeholders and general public further aggravate the situation. Therefore the TTT introduced the general stress being formulated as “Institutional framework”.
- Socio-economic conditions are another important stress because the agriculture and forestry are generating the majority of household incomes which in turn creates conflicts with possible environmental quality objectives. Therefore the TTT inserted another anthropogenic stress, so called “socio-economic issues”.
- Liquid waste management was translated to the water management in view of an integrated water management;
- Waste management was introduced: it encompasses various waste streams which cause either pollution of soil and water (it may cause also air pollution / climate change through emissions of persistent organic pollutants-POPs and greenhouse gasses);
- Agriculture was moved in Land use, water and waste management sectors respectively in a way that agricultural practices (crop pattern, use of mechanization etc.) become part of land use; irrigation and erosion is part of the water management, while packaging waste from pesticides and fertilizers represent a single (hazardous) waste stream to be dealt with in accordance with the EU and national laws.
- For most of sectors additional stresses, and therefore sources / underlying causes have been inserted based on the TTT experience; their relevance will be assessed in the next project phases and consulted with stakeholders

Also, in order to determine the issues of common interest for the shoreline countries, the potential transboundary impact is to be distinguished.

The following sectors / stresses are proposed for further analyses throughout specific project phases:

1. Institutional and legal framework
2. Socio-economic issues;
3. Land use management
4. Water management
5. Waste management
6. Fisheries
7. Forest management
8. Biodiversity and protected areas
9. Natural cycles

There is an obvious overlap between some of elements above: they often lie at the border between 2-3 policy fields (e.g. socio-economic activities which impact biodiversity or other natural resources): rather than arguing on their appropriate placement in one sector or another, attention should be given to ensuring that no key element is actually missing when analyzing the causal chain of stresses for respective sectors, similarly to the method taken for selecting priority monitoring parameters<sup>6</sup>.

This structure shall be discussed within the TTT and consulted with the UNDP/GEF project, including the PPCC members. The table with preliminary analyses of above described sectors / stresses is enclosed in Annex 1. The column on the potential transboundary impact is inserted to indicate that such analyses will follow after the approval of the main stresses over the Prespa Lakes ecosystem.

---

<sup>6</sup> Development of a Transboundary Monitoring System in the Prespa Park Area, Preparatory Stage; Phase A: 3. significant elements/values/issues, relevant criteria and scope, February 2008.

## 4. Approach

Links and relevance of the guidelines for the TDA / SAP<sup>7</sup> for the TTT are given in this chapter. Transboundary Diagnostic Analyses and the Strategic Action Programme are separated as they are considered as two subsequent phases in the guidelines and the project ToR.

The consultant's approach responding to the ToR is described in mirror to the main phases being distinguished in the guidelines. Some phases defined in the guidelines are not reflected in the ToR since they are covered through an assignment which is outside the present Contract; consequently, they are not included in this chapter.

### 4.1 TDA

#### Identify & locate transboundary issues (Scaling – Scoping – Screening)

The first stage in the TDA process is to agree on the transboundary issues. There an initial stakeholder consultation is foreseen to highlight the main issues, which are subject to revisiting by the TTT. They need to agree on whether or not the list is complete, examine their transboundary relevance, determine preliminary priorities and examine the geographical and temporal scope of the identified problems.

This part of the process is reflected in the ToR through the following items:

- To review the list of national stakeholder groups which have been already identified by the GEF project, to update this list and to perform an analysis of national stakeholders' expectations and needs with regards to the Prespa Park.
- To organise national stakeholder workshops (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park. At least one stakeholder workshop should be organised in each country. The results of these stakeholder discussions should be included in National Reports (See report - R2 - below)

Main National Workshop's objectives are as follows:

- Agree on the TDA/SAP process and envisaged outputs
- Discuss and agree on key ecosystem stresses in the Prespa Park area
- Discuss and agree on the criteria for prioritization of key stresses, as well as on the criteria for assessing their transboundary character / impact
- Confirm the list of stakeholders
- Confirm the list of information sources

REC is responsible for the organizing, financing and moderating the national Workshops. There will be three national Workshops: in Agios Germanos, Korca and Resen. Each workshop will gather about 40 participants representing national, regional/local authorities, respective

---

<sup>7</sup> Source: notes of Mr. Laurence Mee following discussions at the GEF TDA/SAP Course Design and Development Session (DACUM) held at the Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations from 15 to 19 July 2002. They have been amended on the basis of the discussions held in the Second GEF International Waters Conference in Dalian, People's Republic of China, 26-29 September, 2002 and further comments from the GEF Implementing Agencies, members of STAP and the GEF Secretariat. They are designed for guidance but do not constitute official policy documents of the GEF.

Agencies, Academia and research institutions, health authorities, the private sector (fisheries, agricultural producers, hunters, industries etc.), service providers (water supply/wastewater management, waste collection, electricity distribution etc.), NGOs. All these stakeholders are already being involved in various thematic working groups established under the UNDP/GEF project. They will be invited to contribute to the creative process in setting the scene for the TDA/SAP project analyzes.

Data collection concerning stakeholders' analyses started in the Inception phase and will continue throughout the TDA period. Upon the sending out the invitation to workshop's participants a questionnaire will be delivered to obtain the information on respective stakeholders' role in the Prespa Park management. In addition, a self-assessment will be carried on by stakeholders, concerning their capacity to take over some management tasks in the future implementation of the SAP.

Responses to the questionnaire and the workshop's results will serve as a basis to the diagnosis of the present institutional / legal framework and to highlighting their capacity to address the transboundary approach in key areas, such as land use planning, socio-economic development, management of protected areas and pollution abatement from various sources. A number of UNDP supported actions are dedicated to improving these capacities; however, the TTT shall prepare an integrated assessment in view of the future ownership over the project results. It is expected that the national Workshops will initiate the stakeholder's analyses in spite of their involvement in the definition of key ecosystem stresses, starting from the anthropogenic pressures (institutional and socio-economic issues).

Where available, official (technical and financial / economic) data will always be used; if this differs from other data, these differences, will be highlighted. However, the TDA/SAP outputs shall be subject to approval by the three countries' stakeholders and therefore the focus will be on official information.

Analyses of potential problems (pressures, stresses, impacts etc) started in the Inception period based on the UNDP/GEF list of preliminary identified stresses. Their transboundary relevance will be assessed upon the National stakeholders' workshops. In addition, through the expertise being made available through the TTT, availability of information will be assessed and the importance of identified gaps for assessing the scope / magnitude of transboundary impacts.

Agreement on preliminary contents with ITA/TL for the TDA will follow based on the proposal of the TTT in this inception report. These will be discussed upon the National workshops as well. The preliminary Agenda for National Workshops is given in Annex 3. The list of participants is given in Annex 4. Criteria to assess the stresses magnitude and transboundary impact will be developed in the next stage, prior to organizing the workshops.

National Workshops will be organized in a way that all the interested stakeholders will be able to discuss the anticipated transboundary stresses that will be assessed in view of stakeholders' authority and capacity to undertake specific and feasible mitigation measures.

### ***Gather and interpret information on environmental and socio-economic consequences of each issue***

Detailed information should be gathered on the consequences of each of the medium and high priority issues in the region. Joint government and local groups (such as the present working groups, the PPCC members as well as the national focal points and national UNDP project

units), shall help gather information and identify key transboundary issues and consequences through collaborative processes.

This phase is indicated in the ToR as follows:

- To gather updated information from national sources, that meets the agreed needs of the TDA. A draft outline of the information expected is presented in Annex 2 (including: data from more recent national censuses, activities undertaken in support of the EU Water Frameworks Directive in Greece, EC CARDS support for WFD in Albania and FYR of FYR of Macedonia, and from other activities of the GEF Prespa Park Project, including the activities of the Monitoring and Conservation Working Group, other projects/surveys, etc.).
- To prepare three draft national reports (R2) to be used in the synthesis of the TDA. The national reports should provide summaries of the stakeholder analyses, the approach to governance within Prespa Park, pressures, impacts and stresses in the Prespa Park, agricultural land assessments, biodiversity, etc. reflecting the information outlined in Annex 2 and further described during the inception meeting. The national reports will be subject to approval from relevant national authorities responsible for Prespa region (i.e. the PPCC members and others). It is essential that all sources of information are appropriately acknowledged. Where appropriate this data should be presented in graphical format or on a map of the Prespa Park.

The TTT already initiated communication with some relevant stakeholders to start collecting background information as to compile the info in the following format:

- (a) **to describe the issue itself** (using available data showing changes over time, etc.);
- (b) **to examine the impact of the issue** from an environmental perspective (e.g. high concentrations of chemical pollutants may be an issue but what is the evidence of impact on the natural environment); and
- (c) **to examine its social and economic effect** (e.g. How many people have their health impaired by chemical pollution? What is the economic cost of the damage to health and the natural environment?).

The national reports will be supported by thematic / sectoral reports. Upon integrating them into National reports the so called “environmental profile” of the transboundary area shall be created. In this way the potential of the area will be assessed in terms of natural resources, the variety of its ecosystems and its biodiversity, but also its constraints and environmental risks – biogeophysical, economic and social. As a result of the thematic reports three national reports will be generated.

A set of status indicators for data presentation will be agreed (these could be monitoring tools in the SAP). Some of indicators are proposed in the scope of technical reports for the Monitoring and Conservation Working Group (which originate from relevant EU Directives). The TTT shall examine to which extent use of these indicators will be possible in view of available (and reliable) data

The National reports will be quite brief (typically some 5 pages per issue) and shall contain objective and quantitative<sup>8</sup> information whenever possible. Climatic Change will be analysed as

---

<sup>8</sup> A web-based list of typical indicators are made available from IWLearn and will be used as a blueprint by the TTT.

this is a catalyst to all the (adverse) environmental processes. In addition, an overall significance of the issues in the region will be assessed and will be spatially determined in thematic maps. The shapefile that was produced during the development of the SAP in 2001 will be asked for from authorities.

Alternative to this is the CORINE Land Use dataset (in scale of 1:100,000), which will be one of the base datasets for the report.

However:

- Image maps of higher resolution can be produced when the parent satellite imagery will be used (15 meters resolution maximum)
- Maps of scales of 1:20.000 or 1:50.000 or even higher accuracy can be produced, depending always on the accuracy of the parent datasets used.

Definition of urban, residential and waste management spatial data:

- Border polygon data for the urban area borders may be requested from the municipalities or the responsible national or regional agencies.
- Point or polygon data with the location of the waste management areas of the local municipalities may also be requested from the appropriate agencies.

### **Complete causal chain analysis**

Completion of a causal chain analysis for each of the priority issues will follow using the mixture of expertise offered through the TTT - scientific for the immediate causes and social and economic for the underlying causes.

In the ToR this step is formulated as following:

- To participate in a TTT / GEF-project team workshop (M2) to present the national reports and to participate in discussions to identify the: (i) key stresses on the ecosystem in the Prespa region, (ii) the priorities of these concerns, (iii) the underlying causes of the stresses, (iv) additional gaps in information, etc.

Methodology for conducting causal chain analyses has been developed for the Global International Waters. Examples of causal chains are available and these shall be used to facilitate the process. Some basic elements of this process / method were given in the REC technical proposal and they are valid for the exercise. However, this workshop will primarily be facilitated by the TL.

The causal chain analysis to be carried out upon the TTT/GEF project team workshop will help to locate potential areas of intervention for the GEF and other institutions interested in initiating and funding future measures. This phase shall set the basis for the Environmental Quality Objectives and the SAP.

### **Complete an analysis of institutions, laws, policies and projected investments**

The TTT should carry out a cross sectoral study to be closely linked to the causal chains themselves. The analysis should examine problems of implementation and compliance as well as an overview of the legal and policy mechanisms as a basis for recommended policy/legal/institutional reforms. It is also important to understand the spectrum of relevant projects, programmes and investments that have been approved or are in the pipeline for the

forthcoming decade. Investment project cycles are generally very long and it is important to understand the current development portfolios as an integral part of the TDA.

This issue is not reflected in the ToR. However, the TTT shall address it in the Synthesis report, as a result of the findings in National reports in combination with results of the TTT/GEF project team workshop. Major input to this will be provided from existing UNDP/GEF activities.

#### **Hold stakeholders meeting to review TDA**

The public participation mechanism for the draft TDA should involve at least one meeting of the key stakeholders and may include review by a wider audience according to the public involvement plan. For the purposes of the stakeholder meeting(s), the draft executive summary should be made available in relevant languages. The graphical representation of the impacts and immediate causes should also prove very useful at this stage.

This task is defined in the ToR in the following way:

- To participate in a stakeholder meeting (M3), to support the presentation of the draft TDA by the TDA/SAP Task Leader. The meeting will be organised by Prespa Park Co-ordination Committee / UNDP-GEF Prespa Park Project.

Executive summary of national and the Synthesis Technical Report will be available in three languages at the website of the UNDP/GEF project and also at the PPCC website prior to organizing the stakeholders meeting. Establishing an integrated and sustainable management of shared resources will require that all the countries agree on the taken approach. It will be the main goal of the stakeholder meeting (M3), where the TL will present the draft TDA. The main outcome of this workshop will be the understanding of the Problem tree, as a basis for the definition of Environmental Quality Objectives and the Strategic Action to meet them. TTT will participate in the process as appropriate.

## **4.2 SAP**

#### **TTT proposes ‘vision statement’ of long-term EcoQOs**

The TTT examines the ‘vision’ for each priority issue. An acceptable “*environmental status*”<sup>9</sup> signifying a solution for each issue represents a long-term Ecosystem Quality Objective.

The ToR defines this task as follows:

- To provide expert input into identifying ecological quality objectives (EcoQOs) and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures. The Contractor will be expected, on the basis of information agreed in the TDA, to suggest potential EcoQOs that can be presented and discussed at a TTT/ GEF-project team workshop (see below). This should be presented in a draft report (R4);
- To participate in a stakeholder meeting (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting). The meeting will be organised by Prespa Park Co-ordination Committee / UNDP-GEF Prespa Park Project.

---

<sup>9</sup> Note that the final outcome of GEF interventions should be reflected in improvement of the state of the natural environment (or its protection from degradation). The EcoQOs should therefore reflect the long-term tangible outcomes in terms of state change and not process or institutional changes. These will be reflected in the management objectives (see subsequent paragraphs).



In response to above tasks, the Consultants will take the approach being exploited in relevant GEF IW projects. Namely, an adaptive process will be applied including the following:

- (a) establishment of long-term Ecosystem Quality Objectives (EcoQOs) for identified key problems / stresses;
- (b) most practical and achievable short-term (project length) measures for making substantive progress towards resolving the problems;
- (c) setting up of time-limited operational objectives as project targets;
- (d) defining appropriate process, stress reduction and environmental and living resource status indicators to monitor progress;
- (e) consultation with stakeholders on the proposals
- (f) ensuring of appropriate institutional measures in place to oversee implementation of the agreed joint actions (for the UNDP/GEF project the ultimate project beneficiary is the PPCC);

The stakeholders' meeting, following the TDA meeting is aimed at finalising the work on the TDA and sets the agenda for the SAP development. The main outcome of this meeting, however, will be the stakeholders' input for the definition of the Environmental Quality Objectives. These should be tangible, measurable and easily communicated to the public. Above described criteria for definition of EcoQO will be used.

### **Conduct feasibility study of options**

The next phases of the SAP as observed in the guidelines do not correspond with the tasks prescribed in the ToR. In the following lines short description of required actions is given.

In the guidelines there is a more profound approach proposed involving feasibility analyses of alternative options for meeting the objectives. Instead, in the ToR the following tasks are foreseen:

- To participate in TTT /GEF-project team workshop (M4) to present / discuss recommendations for EcoQOs and means to achieve these.
- To revise EcoQOs and other material as a result of the conclusions of the TTT / GEF-project team workshop
- To identify, review and report (R5) potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region.

After obtaining stakeholders input to definition of the EcoQO the TTT will brainstorm with the aim to examine each EcoQO and identify possible options for achieving them. The process will involve developing a matrix of options, which part of the causal chain they address, timeframes for implementing them, responsible parties and relative costs (where possible). It should also assign indicative priorities to the solutions proposed. This matrix will be the basis for further technical evaluation. Results of this exercise will be discussed at the TTT/GEF project team workshop.

- To revise EcoQOs and other material as a result of the conclusions of the TTT / GEF-project team workshop.

As part of the regular planning process, the findings/recommendation of the project team workshop will be integrated in a way that the sectoral and cross-cutting environmental quality objectives will be revised reflecting the workshop's results.



- To identify, review and report (R5) potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region.

According to known TDA / SAP projects, the following types of cost estimates can be conducted determining the required funding to meet environmental quality objectives:

- (a) Economic and ecological evaluation of the natural resources;
- (b) Analysis of costs of the actions to meet the targets for each EcoQO;
- (c) Analysis of the value saved by meeting the targets identified by specific actions of the project; and
- (d) Analysis of the benefits obtained after the SAP project is complete.

The Consultant will use the above assessments or their combinations, as appropriate. Whenever possible, unit costs for specific actions (legal/institutional, investments, capacity building and public awareness) will be taken from the National Strategy for Environmental Approximation (2008). For the investments in infrastructure additional sources will be consulted. Cost for adaptation / mitigation measures in the field of Climate change will be estimated based on pilot technologies (biomass energy, hydropower, solar panels, energy efficiency etc.). All the available sources of information for the cost estimations will be appreciated; however, the consultant shall make additional analyses for the sake of accuracy of assumptions.

For example: As for the wastewater management, it appeared clear from the analyses already made<sup>10</sup> that the treatment of wastewater in rural areas would not be possible to be linked with the existing sewerage system gravitating to the WWTP in Resen; therefore constructed wetlands would be the best solution for the scattered villages which are located in the hilly terrain. Calculations for the implementation of this measure will be done based on cost estimates per population equivalent.

- To submit a draft final report (R6) to the ITA and TDA/SAP Task Leader.

Based on previous project phases, the TTT will produce the draft final report.

- To participate, in support of the ITA and TDA/SAP Task Leader, at a final stakeholder workshop (M5) that presents the draft final SAP.

The TTT will support the Task Leader in presenting the SAP to the regional stakeholders.

- To update information and revise draft final report as required within two weeks of the stakeholder workshop and submit a final report (R7).

The TTT will incorporate remarks/recommendations from the stakeholders' workshop into the Final report.

---

<sup>10</sup> Feasibility Study on Environmental Protection of the Lake Prespa, KfW, 2001

### 4.3 Work Programme

The project has been broken down into three major phases, as shown below.

**Table 1: Project phases and Milestones**

#	Phase	Milestone	Date*
<b>0</b>	<b>Inception</b>	<b>Inception Report (R1)</b>	<b>15.12.2008</b>
0.1	Start up of the project	<b>Project Inception Meeting (M 1)</b>	24.11.08
0.2	Inception report outline and preliminary data collection	First Draft of the Inception Report for review by the TL	08.12.08
<b>1</b>	<b>TDA</b>		<b>28.5.09</b>
1.1	Data collection	Outline National reports	16.1.09
1.2	Presentations on the preliminary findings and the TTT approach	<b>National Stakeholders Workshops M2a)</b>	03-06.2.09
1.3	Data collection and integration of stakeholders inputs	<b>Draft National Reports (R2)</b>	27.2.09
1.4	Revision under recommendations / suggestions of UNDP/GEF project team	<b>Final National Reports (R3)</b>	13.3.09
1.5	Discussions concerning main findings in National Reports	<b>TTT/ GEF-project Team Workshop (M2b)</b>	27.3.09
1.6	Synthesis of National Reports and definition of Env. Q. Obj.	<b>Draft Summary Technical Report (R4)</b>	28.05.09
1.7	Integrating comments	<b>Final Summary Technical Report (R5)</b>	05.6.09
<b>2</b>	<b>SAP</b>		<b>15.10.09</b>
2.1	Support the TL for the delivery of TDA	<b>TDA/SAP Stakeholder Meeting (3)</b>	12.6.09
2.2	Drafting Env. Q. Objectives	<b>TTT / GEF-project Team Workshop (M4)</b>	26.6.09
2.3	Integrate discussions / conclusions	<b>Draft EcoQOs and cost estimates (R6)</b>	01.9.09
2.4	Integrate findings	<b>Draft Report (R7)</b>	11.9.09
2.5	Facilitate stakeholders consultation	<b>Final Stakeholder Meeting (M5)</b>	29.9.09
2.6	Integrate comments	<b>Final report (R8)</b>	15.10.09

### 4.4 Phase 0: Inception

**Inception Report (R 1)**, brings forward the TTT's Approach linked to the TDA/SAP guidelines. In this respect the main sources of information are identified, key stresses in Prespa Park are observed and their reconsideration commence. In addition, draft content and format of data to be collected in the next phases is proposed. Last, but not the least, the Work Programme including main project milestones (meetings / deliverables) is drafted.

## 4.5 Phase 1: TDA

After the Inception period the TTT shall collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA; the process will spread by the end of January 2009. **Three National Stakeholder Workshops (M2a)** (in close co-operation with the National component of the GEF Prespa Park project) will be held to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park. They are planned for the first week of February (3-6.02.2009). Results of this work will contribute in setting an outline of the **Three Draft National Reports (R2)** and to revising the priority stresses in the Prespa Park area. Discussing the results of these stakeholder workshops within TTT will contribute to getting a common approach on how they should be included in Three National Reports; a provisional outline of National Reports is given in Annex 2.

Reports are to be rendered by 20<sup>th</sup> of March 2009. At the end of the TDA process there will be a **TTT/ GEF-project Team Workshop (M2b)**, where the Three Final National Reports (R 3) will be presented with the aim to identify the: (i) key stresses on the ecosystem in the Prespa region, (ii) the priorities of these concerns, (iii) the underlying causes of the stresses, (iv) identify additional gaps in information, etc. This phase will complete by the end of March, beginning of April 2009. The Draft Technical Report and Final Technical Report (R4 and R5) will be submitted by end of May 2009.

**A Stakeholder Meeting (M3)**, to support the presentation of the draft TDA by the TDA/SAP Task Leader will be held in June. TTT will assist the TL in facilitating the stakeholders' input for the definition of the **Environmental Quality Objectives (EcoQOs)** at the Stakeholder Meeting (M3).

## 4.6 Phase 2: SAP

Expert input into identifying **Environmental Quality Objectives (EcoQOs)** and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures will be provided by the TTT in the course of summer 2009.

Recommendations and outline cost estimates for measures to meet potential **Ecological Quality Objectives (EcoQOs)** for Prespa Basin will be drafted in the same period. Summer 2009 is suitable for making accessible all the key deliverables produced by the TTT to the public. A kind of public consultation will be initiated through forum to be created at the UNDP website.

The **TTT / GEF-project Team Workshop (M4)** to present / discuss recommendations for EcoQOs and means to achieve these is scheduled for mid/end of June.

As a result of the conclusions of the TTT / GEF-project team workshop he TTT will **revise EcoQOs** and other material identifying, reviewing and **reporting (R5)** potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region by 11<sup>th</sup> of September. This date will coincide with submitting the Draft report; holding the **Final Stakeholder Workshop (M5)** that presents the draft final SAP in support of the ITA and TDA/SAP Task Leader is planned for end of September, whereas the Final Report (R7) shall be submitted by mid of October.

## Table 2: Time schedule and missions of international consultants

Table 2: Time schedule and missions of international consultants

[illegible]

### Missions by international experts

[illegible]

## 4.8 Data Collection Method and Sources of Information

Data collection will be carried out through approaching various sources of information:

- UNDP transboundary and national components project offices
- Institutions (statistical offices, ministries, institutes, universities, agencies etc.)
- Use of web available sites
- Coordination with ongoing projects (EU, NATO funded etc.)
- Networking with members of the respective working groups being established under the UNDP/GEF project

Comparison of data from various sources and their assessment in terms of relevance / validity will follow. Scope of data will have to reflect the requirements of the Water Framework Directive, Habitat and Bird Directives, as well as the requirements of the IUCN Red list of species.

Most of the outputs under the national and transboundary UNDP/GEF components are being received by the REC. These will be used to update the information which is provided in the existing SAP. Relevant information from available reports is summarized below.

### Albania

#### **Economic Analysis – Prespa Park Project Draft Report, June 2008**

Report [provides the following assessments:

- A. Assessment of the ecosystem set up aspects in terms of physical affiliation it establishes with nature
- B. Economic analyses of the most distinguished values of the PA with relevance to anthropogenic impacts
- C. Assessment of CDM related issue

#### **Mainstreaming Ecosystem Health Priorities into Forest Law**

Report provides conclusions and recommendations on mainstreaming forests and forest ecosystem health priorities into Prespa NP and Forests and Forest Service towards the sustainable management with emphasis to legal/regulatory framework.

#### **Mainstreaming Ecosystem Health Priorities Into Agriculture Basic Legislation**

Report provides an assessment of the regulatory framework in the agricultural sector, identification of crosscutting issues with water, forest, and fishery management, in view of the future integrated watershed management. Recommendations on how to introduce the environmentally friendly agricultural practices and enable integration of environmental concerns into agriculture related legal framework.

#### **Mainstreaming Ecosystem Health Priorities Into Fishery Law**

Main problems being identified to affect fishery are: (i) increased fishing effort, (ii) reduced water levels, (iii) eutrophication, (iv) undeveloped FMO etc.

In the report there are two major areas for intervention recognized: 1) the collaboration between the DFP and the FMO members which should play an active role in co-managing these

ecosystems, and 2) the collaboration of neighboring countries through the establishment of a scientific political Committee for the unification of the legislation and the harmonization of interventions in the lake

### **Mainstreaming Ecosystem Health Priorities into Hydrology and Water Resources Management In Prespa Lakes**

This report highlights data on the water balance / fluctuation of the Prespa lakes, the water quality issues as well as recommendations on how to improve in the future the trilateral management of the Prespa park basin.

### **FYR of Macedonia**

#### **Reducing Environmental Impacts of Agriculture in the Prespa Region**

A monitoring equipment was procured as a result of this project, to help in establishment of an early warning system that is the most important step in providing extension support to local growers that will lead to reduction of the pesticide input in Prespa. Locations for the equipment and the data collection method, analysis and dissemination of information (advice, recommendations) to local growers on the optimal pesticide use were determined as well.

As a support to the UNDP Bratislava agriculture support project, field based equipment for soil analyses and soil moisture monitoring equipment was procured within the PDF-B project (this was UNDP CO Skopje contribution to the PDF-B and the regional agriculture project). This equipment needs to be used for training of people from the agricultural associations and the extension service on optimal use of fertilizer and water for irrigation in apple production in Prespa. Experts who need to deliver these trainings have to be hired by the Agriculture support project.

*Trans-boundary cooperation:* Good cooperation between the two project offices in Resen (FYR of Macedonia) and Korca (Albania) already exists since the beginning of the PDF-B project. After the completion of Albanian project's work-plan, the both offices need to foresee activities that need to be implemented under the output 4 of the project (Mechanisms for improved trans-boundary cooperation and transfer of best practices introduced). Strong input on the cross-border activities will be needed by the UNDP RC Bratislava and UNDP COs in FYR of Macedonia and Albania.

### **IPPC**

This report defines subjects to obtaining of B integrated permits within the municipality, assesses the potential pollution sources in respective industries and proposes an institutional setup to carry out the IPPC permitting at local level in accordance with the law on the Environment.

### **Integration of The Ecosystem Health Maintenance Objectives and Practices into the Spatial Plan for the Prespa Region**

Report brings forward best practice examples of European local plan preparation. Exploration of three different planning models, namely in the United Kingdom, the Netherlands and one of the countries in the former Yugoslavia is carried out upon a request of stakeholders. Planning

context and background, looking at a regional planning example and then focusing on local plan making is given for all considered planning patterns.

### **Support for integration of Ecosystem Oriented Forest Management in the Prespa region**

Sustainable ecosystem oriented management guidelines were produced along with an Action Plan for Sustainable Forest Management (ecosystem-oriented forest management) practices that will be implemented in two selected pilot areas within the Forest Management Unit "Leva reka/Bigla.

### **Transboundary component**

#### **Prespa Park - Communication and Education Public Awareness Strategy**

Communication, Education and Public Awareness Strategy and Action Plan itself. It is composed of three parts: the strategy and objectives, the target groups and actions and the implementation arrangements (which include information on staffing, budgeting and evaluation of the plan's execution).

#### **Transboundary Fish and Fisheries Management Specialist**

ToR for a Transboundary fish and fisheries specialist who will assist in addressing priority data gaps, priority threats to the Prespa lakes ecosystem, fish conservation priorities, drafting guidelines on sustainable fisheries, assist in harmonization of the fisheries related legal framework in three littoral countries, recommend on establishment of protection zones, protection of spawning areas, maintenance of riparian forests etc.; in addition, the consultant should assist in the establishment of efficient wardening for illegal fishing by end of 2009; also, he/she will be involved in capacity building of relevant fisheries management organizations.

### **Monitoring and conservation**

A working group is functional towards providing the following major outputs from this activity:

1. Guidelines for the definition of indicators, through which the selected values will be monitored; for the determination of joint indicators and special (national or local) indicators and relevant criteria.
2. Guidelines for the methods for recording indicators
3. Guidelines for the definition of institutions to implement monitoring system in each country (one or more?);
4. Guidelines for trilateral coordination and administration of central transboundary database; required procedure
5. Guidelines for existing and required equipment
6. Guidelines for conducting a needs assessment on GIS requirements, for assessing current status of data and availability and for identifying options for a low cost user-friendly GIS integrated information management system
7. Guidelines for training to implement the monitoring system; who will provide the training and how.

This transboundary activity is highly relevant for the present project.

### **Tourism Development**

This project activity is in initial phase: it shall result in a ToR for a company to undertake the tri-lateral Tourism Strategy and Action Plan; when defining the proposed process for the development of the tri-lateral tourism strategy and action plan, the consultant is expected to be

sensitive to the particular challenges faced in the Prespa region and propose creative ways to ensure 'political buy in' and timely endorsement of the strategy.

### **Water Management**

There are a number of reports being developed under this transboundary component, out of which the legal/technical aspects of the future integrated watershed management are tackled. In addition, the activity includes a brief situational analysis of current and planned water management and related practices, as well as of related institutional capacity in the three Prespa littoral States. The ongoing process of introducing appropriate legal measures for the full transposition and implementation of the EC Water Framework Directive and for engaging in meaningful transboundary cooperation in respect of the Prespa Lakes is presented as well.

#### **4.8.1 Identified sources of information**

In the following lines a revised list of sources of information is presented. In addition, the relevance of specific data for the identification of key stresses in the Prespa Park is given. The TTT shall strive to obtain quoted documents through various communication lines as indicated in previous paragraph.

### **Spatial Planning and regulations**

#### **Greece:**

Ministry of Environment, Spatial Planning and Public Works ([www.minenv.gr](http://www.minenv.gr)) and also regional offices are in charge of issuing and enforcing the spatial planning regulations. ESDP principles and ESPON methodologies are implemented upon the spatial planning (polycentricity, subsidiarity and accessibility are values generally used in spatial planning and in countries outside EU).

There are various planning levels represented, starting from regional to local. Existing planning documents will be used for definition of the land use patterns and land use conflicting with conservation priorities.

#### **FYR of Macedonia**

In FYR of Macedonia the Regional plan for Ohrid-Prespa area is of high importance and relevance. It is available at the Ministry of Environment and Physical planning. Its adoption is planned for beginning of 2009.

There are no spatial plans for the concerned area in the Prespa Park of the Albanian part.

### **Water Management**

There are numerous stakeholders involved in this sector and extensive research is being carried out towards managing the Prespa lakes basin in a sustainable way. In the following lines the most important sources of information identified so far are given. List of background info different from the UNDP/GEF project activities are given in Annex 3.



#### **Greece:**

Regional Water Directorate is responsible for supervision of all other agencies and for watershed management.

Department of Water Resources and Environmental Engineering – National Technical University of Athens developed in February 2008 a National Programme for Water Resources Management and Preservation, It is available at the link: <http://www.itia.ntua.gr/en/docinfo/782/> in Greek language. It will be consulted upon the data collection process.

#### **FYR of FYR of Macedonia**

The water management is shared by the ministry of Environment and Physical planning and the Ministry of Agriculture, Forestry and Water Economy. Hydrological parameters are monitored by the Hydro-meteorological institute, while the water quality is observed by various entities. Based on the stakeholder's analyses, the most relevant data sources will be approached in the next stages.

#### **Albania**

The water management system in Albania is embedded in the Ministry of Environment, Forestry and Water Administration. The UNDP supported water management related reports are of importance for the data collection. Additional data sources will be identified through the participation of various thematic working groups' members to be invited at the national workshops.

### **Waste Management**

#### **Greece**

The "Regional Waste Management Plan"<sup>11</sup> will be requested from the Regional agency; in addition, information from the studies encompassing waste management issues<sup>12</sup> will be collected and analyzed. Local management plans will be requested from local authorities. Crosscutting issues with land use will be addressed through identification and mapping of Spatially Designated Waste Management Areas

#### **Fyr of FYR of Macedonia**

All planning levels will be consulted for this country, from national, through regional (South West FYR of Macedonia Waste Management Study 2004, KfW), including also the municipal waste management plan, if any for the municipality of Resen.

#### **Albania**

No relevant planning documents on waste management exist in Albania, except for measures envisaged in LEAPs.

### **Socioeconomic data**

#### **Greece**

In addition to the analysis provided at the regional spatial planning documents, the Natura 2000 and research project deliverables, additional data for analysis for the area of Greece can be

---

<sup>11</sup> Full Greek document reference: Περιφερειακός Σχεδιασμός Διαχείρισης Στερεών Αποβλήτων

<sup>12</sup> The Designated Waste Management Areas (In Greek: X.Y.T.A.)

obtained by the Statistical Agency of Greece, at [www.statistics.gr](http://www.statistics.gr). Data on the last Census of 2001, plus data and information on sector censuses for later years can be obtained from the Agency<sup>13</sup>.

Specific examples of data provided at the sources above (this data has to be requested on the smallest spatial reference unit available, preferably at the NUTS 5 level):

- Numeric land use and agricultural land use data
- Numeric crop data
- Numeric animal husbandry data
- Numeric population data (such as age classes etc)
- Numeric population economic data (such as occupation on the primary, secondary and tertiary sectors)

#### **FYR of Macedonia**

In FYR of Macedonia census data is from 2002 and it is available in the office of statistics [www.stat.gov.mk](http://www.stat.gov.mk). In addition, data on municipal level will be used.

#### **Albania**

For Albania, apart from official information which is available at [www.instat.gov.al](http://www.instat.gov.al), the data from local Environmental Action plans are of high relevance for this field.

#### **Natura 2000 Areas and associated documentation and GIS data**

##### **Greece**

Society for the Protection of Prespa, and/or Ministry of Environment, Spatial Planning and Public Works ([www.minenv.gr](http://www.minenv.gr)) are the major sources of information for any documentation related to the NATURA 2000 sites (two in the region)<sup>14</sup> in Greece.

GIS NATURA 2000 data is provided from the “European Topic Centre for Nature Protection and Bioversity” at the website of the “NATURA 2000 Software Package”.

Specific kinds of data provided at the sources mentioned above:

- Vector GIS borderline data for the NATURA 2000 areas
- Habitat classification, description data and information

Although the two projects above cover the Greek NATURA 2000 area, the qualitative habitat and generally nature conservation information provided can be used for the whole area of project interest.

There isn't such information available in FYR of Macedonia.

---

<sup>13</sup> Source of data: website of the Agency, at [www.statistics.gr](http://www.statistics.gr)

<sup>14</sup> Map for the 2 projects mentioned above is available at the link: [http://www.minenv.gr/1/12/121/12103/q1210300/00/2008/SCI\\_v25\\_north\\_greece.pdf](http://www.minenv.gr/1/12/121/12103/q1210300/00/2008/SCI_v25_north_greece.pdf) Also, there are available vector GIS data for the the NATURA 2000 and protected areas of Greece at the link <http://www.minenv.gr/1/12/121/12103/q1210300.html> of the Greek Ministry of Environment, Spatial Planning and Public Works.

Only the following document is relevant in Albania:

- ECAT Tirana, 2004-2007. Rising capacities for the protection of wetland ecosystem in Albania (ALWET)

### **Satellite imagery and land use data**

For the whole area of interest, land use data and satellite imagery can also be available from:

- Global Land Cover Facility, where various dates of LANDSAT satellite imagery are available for the three countries of the project in GeoTIF format
- CORINE LAND COVER DATA -reference year 2000- available for the total area of interest from the European Environment Agency for the three countries of the project in vector format

### **Forest Management**

Forest management plans for Greece are available at the locations of Forest Service Offices (in Greek). Most probably they can also be provided by the Ministry of Rural Development and Food ([www.minagric.gr](http://www.minagric.gr)). This will be checked upon the national workshops.

For FYR of Macedonia and Albania national UNDP components will be consulted with regard to available data on forestry planning in the region. Also, the Public Forest Management organizations will be approached.

In addition, the following documents are highly relevant for Albania:

- 1) Qirjo, M. 2000-2001. Local tradition on forest use in Prespa Park.
- 2) Qirjo, M., 2005. Rehabilitation of Forest and Pastures of Ligenas Commune.
- 3) World Bank project. Management Plan for Forestry and Pastures of Ligenas Commune

### **TRABOREMA project**

In addition to other UNDP / GEF supported project activities, the TRABOREMA project will be analyzed. The main document is available to the TTT; however, it will be requested from responsible authorities to obtain more details on the research which is highly relevant for the subject matters of the TTT.

Namely, the TRABOREMA project uses the EU Water Framework Directive as a guideline, aiming to set a monitoring system in the Ohrid/Prespa watershed, in order to determine environmental pressures and impacts in terms of ecological quality ratios, as a base for the simulating various scenarios for the lakes` future ecological status.

## 4.9 Resource Plan

The team members will cover specific fields as following:

- Socio-economic and institutional issues of importance for the TDA process and SAP implementation
- Water management issues relating primarily to the Water Framework Directive requirements and related transboundary issues
  - Hydrology and water balance (availability of water, water demand, present water users etc.)
  - Water supply and wastewater management
  - Ecosystem's pressures, such as water pollution, flood, drought and erosion; climate change impacts if appropriate
- Segregation of ecosystems and related land use, such as:
  - Urban/rural systems and their development plans
  - Transport systems
  - Agriculture / forestry / mining
  - Semi urban and natural landscapes; corridors and buffer zones
  - Protected areas and protection regimes
- Definition of the “environmental profile” and producing thematic maps, by defining spatial references to identified ecosystem's stresses / pressures
- Definition of main stresses, setting of Environmental Quality Objectives and defining means to achieve these along with rough cost estimates

### 4.9.1 Tasks and Time Schedule for International Consultants

The core management (the Team Leader and the Sub-Team Leader) will coordinate above described inputs, providing also the expertise on the land use and spatial planning, social and economic analyses and cost estimates associated with the strategic action plans. The Team Leader will closely cooperate with the international experts: with Dimos Anastasiou he will work on definition of the “environmental profile” With the Magdolina Toth Nagy – the International expert on the implementation of the Aarhus Convention and stakeholder analyses in the TDA processes in CEE, he will work on ensuring the transparency and the effectiveness of the public participation process. Team Leader will obtain also support in the definition of the costing outline of the Action Plan from the international experts in the team. However, the national team will also be actively involved in abovementioned key areas.

In the following tables the main tasks and duties of the international experts are given.

**Table 3: Indicative Missions for Manfred W. Buch**

<b>Mission #</b>	<b>Mission objective / description</b>	<b>Date / Period</b>	<b>No. of days</b>
<i>Phase 0: Inception</i>			
1	Design PowerPoint Presentation for and participate in the <b>Project Inception Meeting</b> (M 1)	23.11.- 24.11.2008	2
2	Assist Ana Petrovska in preparation of the <b>Inception Report</b> (R 1), including the TTT's Approach linked to the guidelines for the TDA / SAP, identify of sources of information, revise Key Stresses in Prespa Park, define content and format of data to be collected, draft Work Programme and Deliverable Requirements, discuss the draft Inception Report, and agree upon any changes so as to finalise it	25.11.- 15.12.2008	4
<b>Sub-total</b>			<b>6</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA Involvement in setting an outline of the <b>Three Draft National Reports</b> (R2)	12.-16.1. 2009	5
4	Assist Ana Petrovska in organising and facilitating <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	5
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports</b> (R2) in the fields of <ul style="list-style-type: none"> <li>• Socio-economic issues</li> <li>• Land-use management</li> </ul> and give support to Natural Cycles issues (Dimos Anastasiou), to be used in the synthesis of the TDA	27.2.-09.3. 2009	5
<b>Sub-total</b>			<b>15</b>
6	Include recommendations and revise the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	10
7	Assist Ana Petrovska in organising and facilitating a <b>TTT/ GEF-project Team Workshop (M2b)</b> , present the Three Final National Reports (R 3) and participate in discussions to identify the: (i) key stresses on the ecosystem in the Prespa region, (ii)	23.-27.3. 2009	5

<b>Mission #</b>	<b>Mission objective / description</b>	<b>Date / Period</b>	<b>No. of days</b>
	the priorities of these concerns, (iii) the underlying causes of the stresses, (iv) additional gaps in information, etc.		
<b>Sub-total</b>			<b>15</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs) and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures; Provide a <b>Draft Technical Summary Report</b> (R4), recommendations and outline cost estimates for measures to meet potential <b>Ecological Quality Objectives</b> (EcoQOs) for Prespa Basin	25.-28.5. 2009	4
9	Participate in a <b>Stakeholder Meeting</b> (M3), to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	0,25
10	Participate in a <b>Stakeholder Meeting</b> (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	0,25
11	Facilitate the stakeholders' input for the definition of the <b>Environmental Quality Objectives</b> (EcoQOs) at the Stakeholder Meeting (M3)	29.5.2009	0,5
12	Participate in <b>TTT / GEF-project Team Workshop</b> (M4) to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	1
13	<b>Revise EcoQOs</b> and other material as a result of the conclusions of the TTT / GEF-project team workshop; identify, review and <b>report</b> (R5) potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region	09.-11.6. 2009	3
14	Assist Ana Petrovska in submitting a <b>Draft Final Report</b> (R6) to the ITA and TDA/SAP Task Leader	26.-28.8. 2009	3
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop</b> (M5) that presents the draft final SAP	16.9.2009	1
16	Assist Ana Petrovska in updating information and revising the draft final report as required within two weeks of the stakeholder workshop and submit a Final Report (R7) on 15 <sup>th</sup> of October 2009	15.10.2009	1
<b>Sub-total</b>			<b>14</b>
<b>TOTAL</b>			<b>50</b>

**Table 4: Dimos Anastasiou (Forestry Specialist and Environmental Scientist / GIS Expert)**

<b>Mission #</b>	<b>Mission objective / description</b>	<b>Date / Period</b>	<b>No. of days</b>
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting</b> (M 1)	23.11.- 24.11.2008	1
2	Assist Ana Petrovska and Manfred Buch in preparation of the <b>Inception Report</b> (R 1), including the TTT's Approach linked to the guidelines for the TDA / SAP, identify of sources of information, revise Key Stresses in Prespa Park, define content and format of data to be collected (ToR Annex 2, updated by TDA/SAP Task Leader), draft Work Programme and Deliverable Requirements, discuss the draft Inception Report, and agree upon any changes so as to finalise it	25.11.- 15.12.2008	1*
<b>Sub-total</b>			<b>2</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA; Involvement in setting an outline of the <b>Three Draft National Reports</b> (R2)	12.-16.1. 2009	2*
4	Participate in <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	3
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports</b> (R2) in the fields of <ul style="list-style-type: none"> <li>• Forestry</li> <li>• Erosion</li> <li>• Land-use management</li> <li>• Natural Cycles</li> </ul>	27.2.-09.3. 2009	1
<b>Sub-total</b>			<b>3</b>
6	Include recommendations and revise the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	2*
7	Participate in <b>TTT/ GEF-project Team Workshop</b> (M2b), present the Three Final National Reports (R 3) and participate in discussions to identify the: (i) key stresses on the ecosystem in the Prespa region, (ii) the priorities of these concerns, (iii) the underlying causes of the stresses, (iv) additional gaps in information, etc.	23.-27.3. 2009	1
<b>Sub-total</b>			<b>3</b>

Mission #	Mission objective / description	Date / Period	No. of days
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs) and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures; Provide a <b>Draft Technical Summary Report (R4)</b> , recommendations and outline cost estimates for measures to meet potential <b>Ecological Quality Objectives</b> (EcoQOs) for Prespa Basin	25.-28.5.2009	2*
9	Participate in a <b>Stakeholder Meeting (M3)</b> , to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	0,5
10	Participate in a <b>Stakeholder Meeting (M3)</b> that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	0,5
11	Participate in <b>TTT / GEF-project Team Workshop (M4)</b> to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	1
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop (M5)</b> that presents the draft final SAP	16.9.2009	1
<b>Sub-total</b>			<b>5</b>
<b>TOTAL</b>			<b>13</b>

Table 5: Magdolina Toth Nagy (Specialist on implementing the EU law in the water management and implementation of the Aarhus Convention)

Mission #	Mission objective / description	Date / Period	No. of days
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting (M 1)</b>	24.11.2008	0
2	Assist Ana Petrovska and Manfred Buch in preparation of the <b>Inception Report (R 1)</b> with regard to the data identification for all the sectors in Albania	25.11.-15.12.2008	1
<b>Sub-total</b>			<b>1</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA: <ul style="list-style-type: none"> <li>• TDA / SAP in view of WFD requirements</li> <li>• Stakeholder analyses and involvement</li> <li>▪ Problem tree matrix and analyses</li> </ul>	12.-16.1.2009	1
4	Participate in <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component	02.2.-06.2.2009	3



<b>Mission #</b>	<b>Mission objective / description</b>	<b>Date / Period</b>	<b>No. of days</b>
	of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park		
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports	27.2.-09.3. 2009	0
<b>Sub-total</b>			<b>4</b>
6	Include recommendations and revise the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	0
7	Participate in <b>TTT/ GEF-project Team Workshop</b> (M2b),	23.-27.3. 2009	1
<b>Sub-total</b>			<b>1</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs)	25.-28.5. 2009	0
9	Participate in a <b>Stakeholder Meeting</b> (M3), to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	0
10	Participate in a <b>Stakeholder Meeting</b> (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	0
11	Participate in <b>TTT / GEF-project Team Workshop</b> (M4) to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	0
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop</b> (M5) that presents the draft final SAP	16.9.2009	0
<b>Sub-total</b>			<b>0</b>
<b>TOTAL</b>			<b>6</b>

#### 4.10 Tasks and Time Schedule for Local Consultants

The REC team composed of country offices in Albania and FYR of Macedonia is led by Ana Petrovska as Project Manager. The overall Project Director is Katarina Stojkovska.

The role of the Project Manager is to guide the team of national experts in providing the inputs for reports and in actively responding to challenges of stakeholders meetings, as well as UNDP/GEF lead project team workshops.

**Table 6: Indicative task description for Ana Petrovska (expert on land use and spatial planning)**

Task #	Task description	Date / Period	No. of days
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting</b> (M 1)	23.11.- 24.11.2008	1
2	Prepare the <b>Inception Report</b> (R 1) assisted by Manfred Buch, including the TTT's Approach linked to the guidelines for the TDA / SAP, identify of sources of information, revise Key Stresses in Prespa Park, define content and format of data to be collected (ToR Annex 2, updated by TDA/SAP Task Leader), draft Work Programme and Deliverable Requirements, discuss the draft Inception Report, and agree upon any changes so as to finalise it	25.11.- 15.12.2008	9
<b>Sub-total</b>			<b>10</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA; Setting an outline of the <b>Three Draft National Reports</b> (R2)	12.-16.1. 2009	5
4	Organize and facilitate <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	5
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports</b> (R2) in the fields of <ul style="list-style-type: none"> <li>• Landscape and land-use management</li> <li>• Socio-economic data</li> <li>• Waste management</li> </ul> to be used in the synthesis of the TDA	27.2.-09.3. 2009	15
<b>Sub-total</b>			<b>25</b>
6	Include recommendations and revise the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	15 ?
7	Organize and facilitate a <b>TTT/ GEF-project Team Workshop</b> (M2b), present the Three Final National Reports (R 3) and participate in discussions to identify the: (i) key stresses on the ecosystem in the Prespa	23.-27.3. 2009	5

Task #	Task description	Date / Period	No. of days
	region, (ii) the priorities of these concerns, (iii) the underlying causes of the stresses, (iv) additional gaps in information, etc.		
<b>Sub-total</b>			<b>28</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Assist Manfred Buch and provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs) and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures; Provide a <b>Draft Technical Summary Report</b> (R4), recommendations and outline cost estimates for measures to meet potential <b>Ecological Quality Objectives</b> (EcoQOs) for Prespa Basin	25.-28.5. 2009	4
9	Participate in a <b>Stakeholder Meeting</b> (M3), to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	0,25
10	Participate in a <b>Stakeholder Meeting</b> (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	0,25
11	Facilitate the stakeholders' input for the definition of the <b>Environmental Quality Objectives</b> (EcoQOs) at the Stakeholder Meeting (M3)	29.5.2009	0,5
12	Prepare and participate in <b>TTT / GEF-project Team Workshop</b> (M4) to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	1
13	<b>Revise EcoQOs</b> and other material as a result of the conclusions of the TTT / GEF-project team workshop; identify, review and <b>report</b> (R5) potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region	09.-11.6. 2009	3
14	Prepare and submit a <b>Draft Final Report</b> (R6) to the ITA and TDA/SAP Task Leader	26.-28.8. 2009	3
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop</b> (M5) that presents the draft final SAP	16.9.2009	1
16	Update information and revising the draft final report as required within two weeks of the stakeholder workshop and submit a <b>Final Report</b> (R7) on 15 <sup>th</sup> of October 2009	15.10.2009	9
<b>Sub-total</b>			<b>25</b>
<b>TOTAL</b>			<b>88</b>

**Table 7: Indicative task description for Katerina Donevska (water management expert)**

Task #	Task description	Date / Period	No. of days
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting</b> (M 1)	23.11.- 24.11.2008	1
2	Provide input for the <b>Inception Report</b> (R 1) for hydrology, irrigation, flood / drought and erosion; identify sources of information, revise Key Stresses in Prespa Park, define content and format of data to be collected (ToR Annex 2, updated by TDA/SAP Task Leader); discuss the draft Inception Report, and agree upon any changes so as to finalise it	25.11.- 15.12.2008	4
<b>Sub-total</b>			<b>5</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA	12.-16.1. 2009	4
4	<b>Participate at Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	5
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports</b> (R2) in the fields of <ul style="list-style-type: none"> <li>Hydrology</li> <li>Irrigation</li> <li>Flood / drought</li> </ul> to be used in the synthesis of the TDA	27.2.-09.3. 2009	7
<b>Sub-total</b>			<b>16</b>
6	Participate in the revision of the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	1
7	Participate at a <b>TTT/ GEF-project Team Workshop</b> (M2b)	23.-27.3. 2009	1
<b>Sub-total</b>			<b>2</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Assist Manfred Buch and provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs) and the means to achieve the desired EcoQOs for the Prespa Park, including assessments of the costs for implementing mitigation measures;	25.-28.5. 2009	3
9	Participate in a <b>Stakeholder Meeting</b> (M3), to support	29.5.2009	1

Task #	Task description	Date / Period	No. of days
	the presentation of the draft TDA by the TDA/SAP Task Leader		
10	Participate in a <b>Stakeholder Meeting</b> (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	1
11	Participate at the Stakeholder Meeting (M3)	29.5.2009	1
12	Prepare and participate in <b>TTT / GEF-project Team Workshop</b> (M4) to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	2
13	<b>Participate in revision of EcoQOs</b> and other material as a result of the conclusions of the TTT / GEF-project team workshop; identify, review and <b>report</b> (R5) potential financing options for the measures to meet the EcoQOs that are appropriate and realistic for the region	09.-11.6. 2009	1
14	<b>Participate in drafting of the Draft Final Report</b> (R6) to the ITA and TDA/SAP Task Leader	26.-28.8. 2009	1
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop</b> (M5) that presents the draft final SAP	16.9.2009	1
16	Participate in revising the draft final report as required within two weeks of the stakeholder workshop	17.-29.9. 2009	1
<b>Sub-total</b>			<b>12</b>
<b>TOTAL</b>			<b>35</b>

**Table 8: Indicative task description for Dragana Ilijevska (expert on water management)**

Mission #	Mission objective / description	Date / Period	No. of days
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting</b> (M 1)	23.11.- 24.11.2008	1
2	Assist Ana Petrovska and Manfred Buch in preparation of the <b>Inception Report</b> (R 1) with regard to the data identification for the water sector	25.11.- 15.12.2008	4
<b>Sub-total</b>			<b>5</b>
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA	12.-16.1. 2009	10
4	Participate in <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	3
5	Discuss the results of these stakeholder workshops	27.2.-09.3.	2

Mission #	Mission objective / description	Date / Period	No. of days
	within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports</b> (R2) in the fields of <ul style="list-style-type: none"> <li>Incorporation of the WFD in the TDA analyses</li> <li>Wastewater management</li> <li>Diffuse source of pollution of water and groundwater (Directive on nitrates from agricultural sources)</li> </ul>	2009	
<b>Sub-total</b>			<b>15</b>
6	Include recommendations and revise the <b>Three National Reports</b> (R3) in the fields mentioned above	09.-20.3. 2009	2
7	Participate in <b>TTT/ GEF-project Team Workshop</b> (M2b),	23.-27.3. 2009	2
<b>Sub-total</b>			<b>4</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs)	25.-28.5. 2009	2*
9	Participate in a <b>Stakeholder Meeting</b> (M3), to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	1
10	Participate in a <b>Stakeholder Meeting</b> (M3) that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	2
11	Participate in <b>TTT / GEF-project Team Workshop</b> (M4) to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	2
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop</b> (M5) that presents the draft final SAP	16.9.2009	1
<b>Sub-total</b>			<b>8</b>
<b>TOTAL</b>			<b>32</b>

**Table 9: Indicative task description for Eduard Cani (expert on ecosystem management and biodiversity)**

Mission #	Mission objective / description	Date / Period	No. of days
<i>Phase 0: Inception</i>			
1	Participate in the <b>Project Inception Meeting</b> (M 1)	24.11.2008	1
2	Assist Ana Petrovska and Manfred Buch in preparation of the <b>Inception Report</b> (R 1) with regard to the data identification for all the sectors in Albania	25.11.- 15.12.2008	2
<b>Sub-</b>			<b>3</b>

Mission #	Mission objective / description	Date / Period	No. of days
<b>total</b>			
<i>Phase 1: Support to Trans-boundary Diagnostic Analysis (TDA) Development</i>			
3	Collect, assess and evaluate updated information from national sources, that meet the agreed needs of the TDA (updated ToR Annex 2): <ul style="list-style-type: none"> <li>Stakeholder analyses in Albania</li> <li>Provision of land use maps</li> <li>Protected areas</li> <li>Biodiversity</li> </ul>	12.-16.1. 2009	4
4	Participate in <b>Three National Stakeholder Workshops (M2a)</b> (in close co-operation with the National component of the GEF Prespa Park project) to reassess the potential problems (pressures, stresses, impacts etc.) that are perceived to impact the ecosystem of the Prespa Park	02.2.-06.2. 2009	3
5	Discuss the results of these stakeholder workshops within TTT and how they should be included in Three National Reports; Prepare inputs to the <b>Draft Three Draft National Reports (R2)</b> in the fields of <ul style="list-style-type: none"> <li>Protected areas</li> <li>Biodiversity</li> </ul>	27.2.-09.3. 2009	3
<b>Sub-total</b>			<b>10</b>
6	Include recommendations and revise the <b>Three National Reports (R3)</b> in the fields mentioned above	09.-20.3. 2009	1
7	Participate in <b>TTT/ GEF-project Team Workshop (M2b)</b> ,	23.-27.3. 2009	1
<b>Sub-total</b>			<b>2</b>
<i>Phase 2: Support to Strategic Action Programme (SAP) Development</i>			
8	Provide expert input into identifying <b>Ecological Quality Objectives</b> (EcoQOs)	25.-28.5. 2009	2*
9	Participate in a <b>Stakeholder Meeting (M3)</b> , to support the presentation of the draft TDA by the TDA/SAP Task Leader	29.5.2009	0,5
10	Participate in a <b>Stakeholder Meeting (M3)</b> that presents the proposed approach to the development of the SAP (linked with the TDA stakeholder meeting)	29.5.2009	0,5
11	Participate in <b>TTT / GEF-project Team Workshop (M4)</b> to present / discuss recommendations for EcoQOs and means to achieve these	08.6.2009	1
15	Participate, in support of the ITA and TDA/SAP Task Leader, at a <b>Final Stakeholder Workshop (M5)</b> that presents the draft final SAP	16.9.2009	1
<b>Sub-total</b>			<b>5</b>
<b>TOTAL</b>			<b>19</b>

## 5. Risks and their mitigation

**Table 10: Risks and their mitigation**

#	Risk	Mitigation measures
1	Failure to get political buy-in for the SAP	<p>Involve the highest possible political level in the Stakeholders Workshops:</p> <ul style="list-style-type: none"> <li>- in agreeing the approach to identify stresses and</li> <li>- in approving the EcoQOs</li> <li>- In defining appropriate mitigation measures for agreed TB stresses</li> </ul>
2	Insufficient involvement of PPCC members, national focal points and technical working groups	<p>Organisation of subsequent meetings with relevant stakeholders during critical periods within completion of various stages independently from national and stakeholders workshops</p>
3	Failure to involve municipal administration (as the primary beneficiary of most of the TB mitigation measures) in the process	<ul style="list-style-type: none"> <li>- Intensive communication with municipalities upon delivery of National Workshops</li> <li>- Public consultation process through making accessible translated executive summaries of key deliverables at various websites (Ministries of Environment, PPCC, UNDP and REC)</li> </ul>
4	Difficulty in obtaining data which are kept outside the UNDP	<p>TTT shall approach both formally and informally key partner institutions to obtain required background documents; however, whenever getting this info requires payment, the TTT will not be able to respond because of the lack of dedicated budget.</p>
5	Difficulty in securing consensus on resource requirements and priorities for implementing envisaged mitigation measures (SAP)	<p>Project stakeholders should be fully engaged throughout the project execution process through the PPCC. Communication with local governments will be also established at the extent possible.</p>
6	Possibility of external constraints and other factors adversely affecting the implementation of the project (e.g. local elections in FYRoM)	<p>The benefits of implementing the SAP will be demonstrated throughout the public consultation process in summer 2009</p>

I suggest also considering the risks of delays in stakeholder responses to the requests etc. from the TTT.



## Colophone

---

Client : UNDP  
Project : TTT for TDA/SAP

Length of report : 59 pages  
Author : Project Manager : Ana Petrovska  
Project Director : Katarina Stojkovska  
Date : 18 March 2009

---

---

## **Annex 1**

### **Main stresses in the PP ecosystem**

---



**Table 1.1: Identified Main Stresses in the Prespa Lakes Basin**

**Comment [PW1]:** This is a good extension to the initial thoughts in the ProDoc. We should encourage early response to this from key stakeholders – especially the PPCC

Sector	Stress	Source	Underlying cause	Potential transboundary impact
1. Institutional framework	1.1 State of the environment for various media is not sufficiently explored / formulated	Lack of a comprehensive monitoring scheme in the Prespa Park	Weak environmental and natural resource governance capacity at the municipal government level (AL, MK, GR).	- The trans-boundary coordination capacity of the (Prespa Park Coordination Committee) PPCC is weak (no full-time professional staff, and appropriate allocation of resources).
	1.2 Implementation of the existing SAP for the Prespa Park is not going as planned	Lack of trained staff in bodies managing protected areas	Watershed perspective is not taken into consideration when setting the policy goals and objectives within the same watershed/basin (AL, GR, MK).	- Disparate sampling strategies, methods of gathering data, and ingrained reluctance to share data without payment.
2. Socio-economic issues	1.3 Various impacts for protected areas / habitats are evident	Public participation in decision making regarding the conservation and management of natural resources is limited although the law requires it	In MK the protected areas are required to fund their own management activities and receive no financial or institutional support from Government.	- A joint fact-finding process with respect to the key elemental facts affecting the Prespa Basin's ecosystem health has not started yet.
	2.1 Excessive exploitation of natural resources	Main sources of income for local communities is exploitation of natural resources (fisheries, cutting of wood used for heating, illegal hunting, agriculture, grazing, use of reed for	Protected area managers have little experience in applying landscape ecology and conservation biology principles. Community and user involvement in natural resource management in all three countries is very low (AL, MK).	- Different priorities perceived by national stakeholders; transboundary perspective is rarely considered
			Low awareness of stakeholders and the private sector concerning the sustainable use of natural resources	- Cooperation between various associations and commercial chambers is limited
			Poor economic development planning	- Local products in the transboundary area rarely find their



		fodder etc. Sustainable development goals are not taken into local / national development policies Sustainable tourism is not considered as an income generating source substituting / supplementing the unsustainable agricultural practices	Low awareness on EU consumers' preferences concerning food and tourist attractions	markets in the EU
<b>3. Land-use management</b>	<b>3.1 Loss of priority shoreline and wetland habitat.</b> <b>3.2 Loss of forest habitats</b> due to the extension of urban / Rural areas, the agricultural land and industry <b>3.3 Transportation of sediments</b> in the lake	Conversion of reedbeds to beaches and wet meadows to agricultural land. (MK, AL) Competing between various land uses Lack of coordinated land use and water management Inappropriate land use practices predominantly in the sectors of forestry and agriculture cause the erosion	Inappropriate scale (national) for land-use planning precludes effective local action to determine and enforce priority uses of sensitive habitats. Experiential Barrier: stakeholders do not have the experience or expertise to integrate ecosystem management objectives and practices into local level planning. Lack of enforcement of existing plans / spatial and urban plans Lack of buffer zones around the protected areas	-
<b>4. Water management</b>	<b>4.1 4.1 Insufficient water quantity</b>	Unsustainable use of water	Lack of integrated water management and planning	-
	<b>4.2 Eutrophication:</b> Increased turbidity; increased algae levels in the epilimnion; decreased oxygen levels in the hypolimnion stress native freshwater ecological communities.	Pollution from organic waste from untreated wastewater and fertilizer runoff increases levels of nitrates and phosphates, leading to eutrophication. (MK, AL, GR)	Excessive use of fertilizers; fertilizers applied w/no info on existing nutrient levels in the soil, nutrient withdrawal estimates or expectation of yield. (MK) Flood irrigation practices increase leaching of nutrients	-

			into surface and ground water (MK) Inadequate understanding of crop requirements for irrigation, fertilizer. (MK) Farmers are risk averse to trying new approaches. Proof of concept needed to reduce perceived risk; (MK, AL) Low level of compliance: Inflexible enforcement regime imposes unrealistically high cost on small industrial polluters. (MK) Financial and knowledge barriers to adopting small scale wastewater treatment options	
	<b>4.3 Degraded aquatic habitat.</b> Hampered movement/ spawning/ population exchange of endemic trout species.	Seasonal irrigation withdrawals render stream sections dry or warmer in streams harboring native species of trout (MK, GR). River weir blocks fish passage. (GR)	Water law in MK and AL does not recognize maintaining in-stream flow for ecosystem health and/or fish and other habitat values as priority uses for water. Inappropriate scale (national) for land-use planning precludes effective local action to determine and enforce priority uses of sensitive habitats. Permitting regime for water use unsettled.	-
		Household detergents contribute 50% of phosphorous (P) load (MK)	Over 80% of the detergents on-sale in local markets contains phosphates. People are unaware of the impact P detergents have on aquatic ecosystems and have no incentives to switch to non-P detergents.	-

			Ineffective implementation and enforcement of MoEFWMPP policy banning phosphate detergents.	
	<b>4.4 Increased seasonal water temperatures in aquatic habitats;</b>	Felling of trees along riverbanks without regard to impact on aquatic ecosystem (MK, GR).	Maintaining natural riparian ecosystems is not a priority for MoEFWM and water management authorities; Riparian ecosystems are misunderstood by local authorities and MoEFWM;	-
	<b>4.5 Altered aquatic animal and plant community dynamics.</b> Altered aquatic plant community dynamics organisms and environment; 5 of 15 pesticides are found to be "highly dangerous" for water.	Pollution from herbicides/ pesticides/ industrial compounds. (MK, GR) 10 of 15 pesticides known to be in use are very toxic for aquatic organisms and environment; 5 of 15 pesticides are found to be "highly dangerous" for water.	Pesticides can be classified as acceptable from human health perspective but can still be toxic to aquatic organisms. Testing standards for pesticides in MK do not adequately take into account ecosystem health parameters. Inappropriate use/Excessive use of pesticides (MK); Individual farmers spray pesticides on orchards between 10-15 times per growing season. (MK) Barrier: No understanding of integrated pest management or economic damage threshold principle for managing pests and minimizing pesticide use and cost. (MK) Barrier: Farmers are risk averse to trying new pest control methods. Proof of concept is required to overcome perceived risk. (AL, MK) Inappropriate disposal of pesticide waste/residue due to inadequate solid waste	-

			management options. (MK) Weak enforcement of pesticide regulations in Resen Municipality due to inadequate decentralized capacity from MoEFWM and MoA. Barrier: Weak capacity of agricultural extension services; no technical assistance; no farmer-to-farmer sharing of lessons (AL, MK).	
<b>5. Waste Management</b>	<b>5.1 Degradation of land</b> <b>5.2 Deterioration of aquatic habitats</b>	Inappropriate waste management practices	Low stakeholders' and community awareness Poor waste management planning	-
		Improper solid waste disposal – empty pesticide bottles dumped in Golema Reka (MK). Disposal of excess apples into Macro Prespa. (approx 40,000 tons in 2003) (MK)	Dumping into the river/lake is cheapest and most convenient way to dispose of them. No convenient and cheap solid waste disposal alternatives. No awareness of the impact such practices have on water quality and environmental quality. True costs of such practices in terms of negative impact on tourism and fisheries are not clear to stakeholders. Farmers not aware of productive uses for excess apples.	-
<b>6. Fisheries</b>	<b>6.1 Reduced populations</b> of native and endemic species.	Fish harvest exceeds sustainable levels. (MK, AL, GR) Harvesting of fish during spawning season reduces the populations of endemic cyprinid and commercial species and salmonids.	Fishery management policy provides little incentive to fishery concessionaire or to individual fishers to maintain long-term sustainability. (MK) Data on fish catch is either absent or unreliable across all three littoral states. Fishery management practice	-





			provides incentive to over harvest the fish and under-report the catch. There is an insufficient property right incentive to invest in long-term, proactive management of the fishery (AL, GR, MK). No effective deterrent to violating fishing regulations; weak enforcement of fishing regulations. (MK, AL, GR) Fish, especially carp, are easily converted to cash. Data on fish species populations and status does not exist (MK, AL).	
	<b>6.2 Inter-specific competition</b> from exotic species and/or potential dilution of genetic diversity.	Introduction of exotic species of fish fauna. (AL, GR, MK)	Management bias towards addressing the symptoms of fishery problems and not the causes; Maintaining uniqueness of Prespa ecosystem and health of endemic species not a fishery management priority. Exclusive focus of fishery practices on short-term commercial gain; species conservation, sport fishing, and ecosystem health are not management objectives in any of the littoral states.	-
	<b>6.3 Concentration of pesticide residues in fish</b>	Inappropriate agricultural practices	Lack of awareness of stakeholders and general public.	-
<b>7. Forest management</b>	<b>7.1 Forest fragmentation/ altered forest structure:</b>	Inappropriate management of forest for commercial species and timber production values. (AL, GR, MK)	Legacy of industrial approach to forest management, versus modern "ecosystem-oriented" forest management. (MK, GR.) Allowable harvest levels	-



			<p>determined without regard to maintaining or rehabilitating natural forest species composition and without regard to impacts on other species. (MK, AL).</p> <p>Management bias towards forest engineering and timber production, not forest ecology. (MK, AL, GR).</p> <p>Protected area management is funded solely exploitation of forest resources and some tourism, limiting management to basic organizational necessities.</p> <p>More developed conservation programs will require access to external sources of funding. (AL, MK).</p> <p>Forest management law in MK and AL does not recognize maintaining ecosystem health and wildlife habitat as a legitimate objective for forest management.</p>	
		<p>Destructive harvesting of medicinal plants and other non-timber forest products. (AL, MK)</p>	<p>Root causes: inventory data not available for management of populations leading to poor understanding of impacts. Existing restrictions on the harvesting of key species not enforced.</p> <p>Sales of medicinal plants and other NTFPs provide much needed revenue for park management.</p>	-
		<p>Grazing/foraging of excessive numbers of goats in forestlands and</p>	<p>Forest in AL-Prespa is an open access grazing, fodder, and firewood resource.</p>	-

		acquisition of fodder from forest lands. (AL)	Village communal forests are not providing sufficient fodder for animals, increasing pressure on protected area forests. Fodder production constraints in AL Prespa limit use of non-browsers such as cows.	
		Concentrated firewood collecting results in excessive impact on certain forest communities. (AL)	Ill-planned and controlled firewood extraction. (AL) People need firewood for cooking and heating and there are no alternative sources within AL-Prespa. People have no incentive to upgrade old, inefficient wood burning stoves to new more efficient models. Homes are terribly energy inefficient.	-
<b>8. Protected areas and biodiversity</b>	<b>8.1 Loss of biodiversity 8.2 Loss of ecosystem homogeneity</b>	Natural cycles Ecosystem fragmentation due to anthropogenic factors; Inappropriate land use	Poor landscape and land use planning; Weak enforcement capacities; Low stakeholders and general public awareness;	-
<b>9. Natural Cycles</b>	<b>9.1 Altered littoral zone habitats</b> due to water level decline; it has unknown impact on priority species. <b>9.2 Changed water balance</b> <b>9.3 Poverty increase</b>	Mild drought/lower precipitation in the basin and increased air temperatures, increased outflow of water through cracks in the lakebed; Socio-economic vulnerability to climate change.	Potentially aggravating/exacerbating anthropogenic factors: Inability of resource managers to anticipate and respond to change (MK, AL);	-

---

## **Annex 2**

### **Proposed outline of National Reports**

---

1. Summary
2. Institutional Framework / stakeholders analyses
  - National stakeholders
  - Local stakeholders
  - Agricultural producers associations
  - Fishermen associations
  - Hunters
  - Local communities
  - Municipal service operators
  - Forest management enterprises
  - Bodies for management of national parks
  - Industries
  - Tourist agencies and private tourist entrepreneurs
  - NGOs
  - Preliminary stakeholders analyses
3. Socio-economic issues
  - Demography
  - Economic development and trends
  - Employment
  - Social issues
  - Mobility in the region
  - Assessment of impacts over the ecosystems health due to the socio-economic issues
  - Potential transboundary impact
3. Land use
  - Primary sector
  - Agriculture
  - Fishing
  - Forestry
  - Mining
  - Urbanization, housing, urban infrastructure, development and planning
  - Transportation systems
  - Future land use scenarios and conflicting land use
  - Preliminary data gap analyses and envisaged approach to minimize the data gap
  - Potential transboundary impact
4. Water management
  - Hydrology
  - Water supply and wastewater
  - Monitoring of surface water quality
  - Irrigation
  - Diffuse source of pollution
  - Flood / drought

- Erosion
- Assessment of impacts over the water quality
- Preliminary data gap analyses
- Envisaged approach to minimize the data gap
- Potential transboundary impact

5. Waste Management

- Waste streams and waste generation
- Municipal waste
- Industrial non-hazardous waste
- Hazardous and health care waste
- Waste from agriculture
- Present waste management practices including waste disposal
- Assessment of impacts due to the inadequate waste management
- Preliminary data gap assessment
- Envisaged approach to minimize the data gap
- Potential transboundary impact

6. Fisheries

- Fish and fishing practices
- Assessment of impacts over the fish species and fisheries
- Preliminary data gap assessment
- Envisaged approach to minimize the data gap
- Potential transboundary impact
- Forest management
- Forests pattern and relevant forest management practices
- Impacts from improper forest management
- Preliminary data gap assessment
- Envisaged approach to minimize the data gap
- Potential transboundary impact

7. Protected areas and biodiversity

- Status of ecosystems of protected areas
- Status of Biodiversity
- Threats to ecosystem health and biodiversity
- Preliminary data gap assessment
- Potential transboundary impact

8. Natural Cycles

- Factors driving natural cycles
- Tectonic activity
- Climate change
- Impacts over the socio-economic conditions, landscape and ecosystem management
- Preliminary data gap assessment
- Envisaged approach to minimize the data gap

9. Conclusions – important to include key issues of **trans-boundary** importance for each country etc.

---

## **Annex 3**

### **List of relevant data sources**

---



#### **Fyr of FYR of Macedonia**

1. Strategic Action Plan for the sustainable development of the Prespa Park, 2005
2. National Environmental Action Plan of the Republic of FYR of Macedonia, DPSIR Report on Water, 2004
3. National Strategy for Environmental Approximation of the Republic of FYR of Macedonia, 2008
4. Consultant Report on Enhancing Transboundary Cooperation in Water Management in the Prespa Lakes Basin, 2008
5. The study on integrated water resources development and management master plan in FYR of Macedonia – JICA Study – 1999 –
6. Annual reports on the state of environment – available on [www.moepp.gov.mk](http://www.moepp.gov.mk)
7. Agricultural census 2007 – [www.stat.gov.mk](http://www.stat.gov.mk)
8. Restoration plan Golema reka – UNDP project available in the regional office Resen
9. “Reducing the environmental impact of agriculture” project – municipality of Resen, UNDP office Resen
10. Forest Management Plan (of the Public Enterprise for Forest Management in the municipality of Resen)
11. LEAP Resen – municipality of Resen
12. Second National communication on Climate Change, 2008, Ministry of Environment and Physical Planning of the Republic of FYR of Macedonia
13. kfW Study on Environmental Protection (2001)
14. Expert Report on Water Resources Management for the Spatial Plan of the Republic of FYR of Macedonia, RIKOM, 1998
15. Report on Second Communication on Climate and Climate Changes and Adaptation in the Republic of FYR of Macedonia, Section: Vulnerability Assessment and Adaptation for Water Resources Sector, (Ministry of Environment and Physical Planning/ UNDP), December 2006.
16. National Action Plan to Combat Desertification and Land Degradation in FYR of Macedonia-draft, 2006, (Ministry of Environment and Physical Planning/ UNDP)
17. Official data from the state institutions of the Republic of FYR of Macedonia (MoEPP, MAFWE, AHMW)
18. [www.moepp.gov.mk](http://www.moepp.gov.mk)
19. [www.meteo.gov.mk](http://www.meteo.gov.mk)
20. [www.unfccc.int](http://www.unfccc.int)
21. [www.mzsv.gov.mk](http://www.mzsv.gov.mk)
22. KfW Feasibility Study, Project Preparation & Development of the Transboundary Prespa Park Project, Part V Hydrology Report, 2005

#### **Albania:**

- 1) Group of authors, 1999-2000. Multi-sector report for the Prespa Park designation.
- 2) Ministry of Environment Forest and Water Administration 2008. The Report on Environmental Situation in Albania 2005-2007
- 3) Selenica, A., Gani, P., 2007. Mainstreaming ecosystem health priorities into hydrology and water resources management in Prespa lakes
- 4) 2003. Strategic Action Plan for the Sustainable Development of the Prespa Park.

## **Other projects of the Prespa Area**

### **“Support to institutional cooperation between Greece, Albania and the FYR of Macedonia within the framework of the transboundary Prespa Park”**

The project was implemented in 2003, with funding by the Greek Development Assistance (Hellenic Aid), Greek Ministry of Foreign Affairs, and co-funding by the Society for the Protection of Prespa through WWF Greece. The Society for the Protection of Prespa was the main implementing agency. Collaborating partners were the environmental NGO Protection and Preservation of Natural Environment in Albania (PPNEA) in Albania, and the Municipality of Resen in the FYR of FYR of Macedonia. Relevancy to the Stresses Table: To review the policy objectives and how they relate to the stresses table themes.

Project “Conservation of the endemic trout species of Prespa”

[http://www.spp.gr/article\\_detail.asp?e\\_cat\\_serial=001011005&e\\_cat\\_id=259&e\\_article\\_id=221](http://www.spp.gr/article_detail.asp?e_cat_serial=001011005&e_cat_id=259&e_article_id=221)

Relevance to Stresses Table: Fisheries and biodiversity, land use and management (highly related also to Birds and Habitats Directives of the EU) Source of Documents: SPP –Society for the Protection of Prespa

Action “One Europe, More Nature” with the cooperation of WWF Greece and SPP, which is examining the “labeling scheme” possibilities for the environmentally friendly products at the location of the Prespa Park. Relevancy to the Stresses Table: High, since it is examining primary production can coexist with environmental protection and conservation objectives. Relates to land use, agriculture, eutrophication, hydrology and non-point source pollution, and nitrification. There are no documentation available so far on the web ([http://www.spp.gr/article\\_detail.asp?e\\_cat\\_serial=001004007&e\\_cat\\_id=223&e\\_article\\_id=179](http://www.spp.gr/article_detail.asp?e_cat_serial=001004007&e_cat_id=223&e_article_id=179)), but could be requested from WWF Greece and SPP.

## **European Research Projects at the Prespa Lake**

Bird Ringing in Greece (1984-1986), from Hellenic Ornithological Society.

Relevancy to the Stresses Table: Could provide data on biodiversity of the area, however there is no documentation of the Project available on the web. Programme Acronym: [ENVPROT 3C](#)

“Concepts for integrated transboundary water management and sustainable socio-economic development in the cross border region of Albania, Former Yugoslav Republic of FYR of Macedonia (FYROM) and Greece” Project Acronym: TRABOREMA Relevancy to Stresses Table: Land use, hydrology, eutrophication and management/monitoring approaches and proposals for future sustainable land use forms.

## **Scientific Articles of some importance especially for biodiversity, fisheries, eutrophication and hydrology**

Hollis, G. E. & A. C. Stevenson, 1997. The physical basis of the Lake Mikri Prespa systems: geology, climate and water quality. *Hydrobiologia* 351: 1–19

Anovski, T., M. Kolaneci, J. Milevski, P. Ristevski & A. Stamos, 2001. Hydrological aspects and water balance of Prespa Lakes. In Anovski, T. (ed.), Progress in the Study of Prespa Lake using Nuclear and Related Techniques. Project Report, IAEA Regional Project RER/8/008, ISBN 9989-650-21-7, Skopje, FYR of Macedonia, 53–66.

Berxholi, A., 1997. Human pressure in Prespa basin: problems and alternatives. Proceedings of the International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography. Tirana, Albania, 203–206.

Catsadorakis, G., Malakou, M. (1997) "Conservation and management issues of Prespa National Park" *Hydrobiologia* 351: 175-196

Chavkalovski, I., 1997. Hydrology of Prespa Lake. Proceedings of International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography, Tirana, Albania, 9–14.

Crivelli, A. J., Catsadorakis, G., Malakou, M., Rosecchi, E. (1997) "Fish and fisheries of the Prespa lakes" *Hydrobiologia* 351: 107-125

Eftimi, R., E. Micevski & A. Stamos, 2001. Geological and hydrogeological conditions of the Prespa Region. In Anovski, T. (ed.), Progress in the Study of Prespa Lake Using Nuclear and Related Techniques. Project Report, IAEA Regional Project RER/8/008, ISBN 9989-650-21-7, Skopje, FYR of Macedonia, 11–22.

Hollis, G. E., Stevenson, A. C. (1997) "The physical basis of the Lake Mikri Prespa systems: geology, climate, hydrology and water quality" *Hydrobiologia* 351: 1-19

Löffler, H., Schiller, E., Kusel, E., Kraill, H. (1998) "Lake Prespa, a European natural monument, endangered by irrigation and eutrophication?" *Hydrobiologia* 384: 69-74

Milevski, J., Ristevski, P., Tanusevska, D. (1997) Influence of rainfalls on the oscillations at Prespa Lake. Proceedings of International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography, Tirana, Albania, pp 52-57

Nastov, A. D. (1997) Implementation of international criteria for the integral protection of Prespa ecosystem. Proceedings of International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography, Tirana, Albania, pp 193-197

Naumoski, T., V. Novevska L. Lokoska & V. Mitic, 1997. Trophic state of Prespa Lake. Proceedings of International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography, Tirana, Albania, 132–137

Shapkarev, J., 1997. Qualitative and quantitative composition of the macrozoobenthos in Prespa Lake. Proceedings of International Symposium Towards Integrated Conservation and Sustainable Development of Transboundary Macro and Micri Prespa Lakes, PPNEA, ILAR Typography, Tirana, Albania, 118–125.

Fisheries decline in the freshwater lakes of northern Greece with special attention for Lake Mikri Prespa (English) Crivelli, A.J., (Biological Station of Tour du Valat, Arles (France)) In: Management of freshwater fisheries; Proceedings of a symposium organized by the European Inland Fisheries Advisory Commission, Goeteborg, Sweden, 31 May - 3 June 1988 van Densen, W.L.T. (ed.) Steinmetz, B. (ed.) Hughes, R.H. (ed.) / FAO, Rome (Italy). European Inland Fisheries Advisory Commission , 1990, p. 230-24

#### **Citations with lesser geographic relevance**

Of some relevance, since the project is for the Mikri Prespa Lake: The LIFE NATURA 2000 Project in the period 2002-2007, available at the links:

[http://www.spp.gr/article\\_detail.asp?e\\_cat\\_serial=001012001&e\\_cat\\_id=261&e\\_article\\_id=198](http://www.spp.gr/article_detail.asp?e_cat_serial=001012001&e_cat_id=261&e_article_id=198)

and

[http://www.spp.gr/article\\_detail.asp?e\\_cat\\_serial=001005003&e\\_cat\\_id=211&e\\_article\\_id=169](http://www.spp.gr/article_detail.asp?e_cat_serial=001005003&e_cat_id=211&e_article_id=169),

were reports and deliverables of the Project in English are provided.

---

## **Annex 4**

### Preliminary Agenda for the national workshops

---

## NATIONAL WORKSHOPS

### Technical Task Team (TTT) for the collection, assessment and evaluation of national information in support of the Transboundary Diagnostic Analysis (TDA) and development of a Strategic Action Programme (SAP) in the Prespa Lakes Basin

Time	Agenda	Item
<b>1<sup>st</sup> day</b>	<b>Morning sessions</b>	
10.00– 10.30	<b>Registration</b>	
10.30– 1.00	<b>Introduction</b>	<ul style="list-style-type: none"> <li>• Official opening of the meeting (REC)</li> <li>• Introduction (UNDP/GEF)</li> <li>• Objectives of the meeting (Ana Petrovska)</li> <li>• Tour de table</li> </ul>
11.00-12.30	<b>Session I: <i>Setting the scene</i></b>	<ul style="list-style-type: none"> <li>• TDA/SAP process (Ana Petrovska)</li> <li>• Inception report / major project challenges (TTT)</li> <li>• Identified sources of information (TTT)</li> </ul> <i>Discussions</i>
12.30– 2.45	<b>Coffee break</b>	
12.45– 4.00	<b>Session II: Key stresses</b>	<ul style="list-style-type: none"> <li>▪ Sectors, stresses, sources, underlying causes, potential transboundary impacts</li> <li>▪ Prioritization criteria</li> <li>▪ Outline of National Reports</li> </ul> <i>Questions &amp; Comments</i>
14.00-15.00	<b>Lunch</b>	
	<b>Afternoon sessions</b>	
15.00-16.30	<b>Session III: Transboundary impacts</b>	<ul style="list-style-type: none"> <li>▪ Criteria to determine the potential transboundary impact (TTT)</li> <li>▪ Magnitude of transboundary impacts (TTT)</li> </ul> <i>Questions &amp; Comments</i>
16.30-16:45	<b>Coffee break</b>	
16:45-17.30	<b>Session IV: Wrap-up of Workshop Results</b>	<ul style="list-style-type: none"> <li>• <b>Key Stresses and Transboundary Impacts finally discussed and agreed upon</b></li> </ul> <i>Questions &amp; Comments</i>



---

## **Annex 5**

### Preliminary list of participants

---



NATIONAL WORKSHOPS  
3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> of February

List of participants

## FYRoMacedonia

Institution		Participant
<b>National UNDP Components</b>		
1	UNDP GEF Prespa Project, National Component, FYR of Macedonia	Aleksandar Ivanovski, Project Specialist, <a href="mailto:Aleksandar.ivanovski@undp.org">Aleksandar.ivanovski@undp.org</a>
2	UNDP GEF Prespa Project, Transboundary Component	Gordana Cvetkovska, Project Assistant
3	GEF/UNDP project, FYR of Macedonia	Mr. Aleksandar Blazeovski, <a href="mailto:aleksandar.blazeovski@undp.org">aleksandar.blazeovski@undp.org</a>
4	GEF/UNDP project, FYR of Macedonia	Mr. Nikola Zdravevski, <a href="mailto:nikola.zdravevski@undp.org">nikola.zdravevski@undp.org</a>
5	UNDP-GEF project, FYR of Macedonia	Mr. Dimitrija Sekulovski, <a href="mailto:dimitar.sekulovski@undp.org">dimitar.sekulovski@undp.org</a>
<b>National stakeholders:</b>		
6	Ministry of Environment and Physical Planning	Darinka Jantinska; Sasko Jordanov; Ms. Lidija Zafirovska
7	Water Department, Ministry of Environment and Physical Planning, FYR of Macedonia	Mr. Ilber Mirta, ylber <a href="mailto:mirta@hotmail.com">mirta@hotmail.com</a>
8	Head of Sector for Water Master Plan, Ministry of Agriculture, Forestry and Water Economy, FYR Macedonia	Mr. Bojan Durnev, <a href="mailto:durnev@wmp.gov.mk">durnev@wmp.gov.mk</a>
9	Ministry of Economy	
11	Public Forests - "Prespadrvo"	
12	National park "Pelster"	
13	National park "Galicica"	Andon Bojadzi, <a href="mailto:andon@galicica.org.mk">andon@galicica.org.mk</a>
14	Hydrobiology institute Ohrid	Dr. Trajce Naumovski, Research Fellow
15	Spatial Planning Agency	Ms. Lidija Trpenoska – Simonovik, <a href="mailto:l.trpenoska@app.gov.mk">l.trpenoska@app.gov.mk</a>
16	Civil Engineering Faculty	Ms. Cvetanka Popovska, <a href="mailto:popovska@gf.ukim.edu.mk">popovska@gf.ukim.edu.mk</a>
17	National Programme Officer,	Ms. Stanislava Dodeva,

	Swiss Cooperation Office,	<a href="mailto:stanislava.dodeva@sdcc.net">stanislava.dodeva@sdcc.net</a>
18	Ms. Darinka Jantinska	Department for European Integration Ministry of Environment and Physical Planning Skopje
19	Head of Department for Applied Fishery and Aquaculture. Hydrobiological Institute Ohrid	Zoran Spirkovski Phone: ** 389 71 359 913 E-mail: <a href="mailto:zoranspi@hio.edu.mk">zoranspi@hio.edu.mk</a>
20	Department for Hydrobotany, Hydrobiological Institute Ohrid	Sonja Trajanovska Phone: ** 389 75 336 055
21	Macedonian Museum of Natural History	Dr. Svetozar Petkovski Phone: ** 389 70 369 587
22	Department for Water Quality, Hydrobiological Institute Ohrid	Elizabeta Sarafilovska Phone: ** 389 71 470 726
23	Dept of Waters and Communal Hygiene, Republic Institute for Health Protection Skopje	Mr. Mihail Kochubovski Phone: ** 389 70 252 381; Email Address: <a href="mailto:kocubov58@yahoo.com">kocubov58@yahoo.com</a>
24	Macedonian Information Centre, Ministry of Environment and Physical Planning Skopje	Ms. Ljupka Dimovska Email Address: <a href="mailto:l.dimovska@moepp.gov.mk">l.dimovska@moepp.gov.mk</a>
25	Laboratory for Ecology of Algae and Hydrobiology, Institute of Biology, Faculty of Natural Sciences and Mathematics, Skopje	Dr. Svetislav Krstic Phone: **389 76 557 382; E-mail Address: <a href="mailto:skrstic@iunona.pmf.ukim.edu.mk">skrstic@iunona.pmf.ukim.edu.mk</a>
26	Head of Department for sustainable Development and Investments. Ministry of Environment and Physical Planning.	Kaja Shukova Phone: ** 389 75 269 936
27	Galicica National Park, Ohrid	Andon Bojadzi Phone: ** 389 75 282 200; E-mail Address: <a href="mailto:andon@galicica.org.mk">andon@galicica.org.mk</a>
28	Ph. D. Full Professor at the Department of Botany, Biological Institute, Faculty of Sciences, Skopje	Vlado Matevski, Phone: ** 389 70 398 085; E-mail Address: <a href="mailto:vladom@iunona.pmf.ukim.edu.mk">vladom@iunona.pmf.ukim.edu.mk</a>
29	Ph.D. Dean of the Faculty of Agricultural Sciences and Food. Skopje.	Dr. Ordan Cukaliev Phone: ** 389 70 328 863; E-mail Address:

		<a href="mailto:ordan.cukaliev@zf.ukim.edu.mk">ordan.cukaliev@zf.ukim.edu.mk</a>
<b>Local Stakeholders</b>		
30	Municipality of Resen	Ms. Meri Trajkovska; <a href="mailto:meri.trajkovska@resen.gov.mk">meri.trajkovska@resen.gov.mk</a>
31	Municipality of Resen	Ms. Jovana Covic, <a href="mailto:jovana.covic@resen.gov.mk">jovana.covic@resen.gov.mk</a>
32	Municipality of Resen	Tatiana Kumulovska
33	Municipality of Resen	Mr. Dinitar Buzlevski Mayor of Resen
<b>Private sector</b>		
34	Association of Fishermen	
35	Association of apple producers	
36	Association of Hunters	
<b>NGO</b>		
37	NGO Coalition Prespa, Resen, FYR of Macedonia	Nikola Zdravevski, <a href="mailto:nikbiologist@yahoo.com">nikbiologist@yahoo.com</a>
38	NGO Focus, FYR of Macedonia	Mr. Tome Petkovski; <a href="mailto:tomepetkovski@mt.net.mk">tomepetkovski@mt.net.mk</a>
39	NGO Ecoprotection, FYR of Macedonia	Ms. Sonja Spirovska; <a href="mailto:spirovska@yahoo.com">spirovska@yahoo.com</a>
40		Dr. Voislav Vasic, independent Expert on Ornithology; Phone: **381 11 3233 657; Mobile: **381 65 2072 977 E-mail Address: <a href="mailto:vokivasic@bvcom.net">vokivasic@bvcom.net</a>
41		Oliver Avramovski, expert in Strategic Planning and Development. National Park Galicica, Ohrid. Phone: ** 389 76 432 131; Email Address: <a href="mailto:oliver.avramoski@gmail.com">oliver.avramoski@gmail.com</a>

## Albania

Institution		Participant
<b>National UNDP Components</b>		
1	UNDP GEF Prespa Project, National Component Albania	Ardit Konomi, Project Coordinator <a href="mailto:Ardit.konomi@undp.org">Ardit.konomi@undp.org</a>
2	UNDP GEF Prespa Project, Tirana, Albania	Eno Dodbiba, Project Specialist, <a href="mailto:Eno.dodbiba@undp.org">Eno.dodbiba@undp.org</a>
3	UNDP GEF Prespa Project, National Component Albania	Ardit Konomi, Project Coordinator <a href="mailto:Ardit.konomi@undp.org">Ardit.konomi@undp.org</a>

National stakeholders:		
4	Ministry of environment, Forests and Water Administration Tirana	Mr. Kozma Kocani Head Forestry Section
5	Prespa National Park Albania	Pandi Kostofski Director, <a href="mailto:pandekostofski@gmail.com">pandekostofski@gmail.com</a>
6	University of Tirana, Albania	Ferdinand Bego, Professor Associate <a href="mailto:ferdibego@albaniaonline.net">ferdibego@albaniaonline.net</a>
7	Technical Secretariat of Waters, Ministry of Enviroment, Forests and Water Administration, Albania	Mr. Skender Hasa, <a href="mailto:shasa@moe.gov.mk">shasa@moe.gov.mk</a>
8	Urban Planning Department, Regional Council of Korca,	Mr. Anesti Teneqexhi,
9	National Park, Forestry Department, Korcha	Mr. Niko Xega, <a href="mailto:nikoxega@gmail.com">nikoxega@gmail.com</a>
10	Health Authorities	
11		
12	Inspector, Fisheries Inspectorate of Korcha Prefecture, Korcha	Mr. Pellumb Hoxha
13	Museum of Natural Sciences	Dr. Alfred Mullaj
14	Nature Protection Policies Directorate, Ministry of Environment, Forests and Water Administration	Elvana Ramaj <a href="mailto:eramaj@moe.gov.al">eramaj@moe.gov.al</a>
15	Associate Professor , University of Tirana, Albania	Ferdinand Bego
16	Birds, esp. waterbirds	Klodian Aliu ( <a href="mailto:kaliu@moe.gov.al">kaliu@moe.gov.al</a> )
17	Water Monitoring, Energy, Water & Environment department Polytechnic University of Tirana (former Institute of Hydrometeorology)	Dr. Maringlen Gjonaj
18	Head of Water Monitoring, Energy, Water & Environment department Polytechnic University of Tirana (former Institute of Hydrometeorology)	Ms. Emirjeta Adhami <a href="mailto:thadhami@icc-al.org">thadhami@icc-al.org</a>
19	Tirana University, Albania	Narin Panariti
20	Director Statistics Directorate, INSTAT, (Korcha Prefecture branch)	Mr. Sami Mechollari
21	Environment and Forestry Agency (EFA), MoEFWA [monitoring endangered tree	Kliti Starja <a href="mailto:k_starja@yahoo.com">k_starja@yahoo.com</a>

	species]	
22	Prespa National Park Albania	Pandi Kostofski <a href="mailto:pandekostofski@gmail.com">pandekostofski@gmail.com</a>
23	Prespa National Park	Director
<b>Local Stakeholders</b>		
24	Regional Fisheries Inspector, Ministry of Enviroment Forests and Water Administration, Korcha	Pellump Hoxha, T: +355 684060536, F: +355 692315021
25	Regional Council of Korca	
26	Municipality of Liqenas, Proger and Qender Bilisht	
27	Municipality of Proger	
28	Municipality of Qender Bilisht	
29	Municipality of Korcha	Mr. Edmond Themelko Head of Liqenas Commune
<b>Private sector</b>		
30	Association for Protection of Forests and Pastures	Vasil Jankula, Chairman
<b>NGO</b>		
31	Association for Protection of Forests and Pastures	Vasil Jankula, Chairman
32	Albanian Institute for Nature Protection Tirana	Mr. Thimaq Lako
33		Dr. Spase Shumka, PPNEA (sprespa@yahoo.co.uk)
34		<a href="mailto:ferdibego@albaniaonline.net">ferdibego@albaniaonline.net</a>
35		Prof. Sulejman Sulçe (ssulce@yahoo.fr)
36		Prof. Arsen Proko
37	ECAT Tirane	Valbona Simixhiu, GIS expert Rr. "Abdyl Frasheri", Pall. 16, Shk. 6. Ap. 53, Tirana Phone: +355 4 23930; +355 4 263 853 Fax: +355 4 23930 Email: <a href="mailto:ecat@ecat-tirana.org">ecat@ecat-tirana.org</a>

## Greece

Institution	Participant
-------------	-------------

National UNDP Components		
1	Greek Prespa Management body	Ms. Lito Papadopoulos
National stakeholders:		
2	Ministry of Environment, Spatial Planning and Public Works	Aikaterini Stylogianni Staff member of Nature Management Section
3	Central Water Agency, Ministry of Environment, Greece	Ms. Penny Karahaliou; <a href="mailto:pennykar@otenet.gr">pennykar@otenet.gr</a>
4	National Forest Management Body, Ministry of Development, Greece	Ms. Alik Skliri, Prespa, <a href="mailto:skliria@ypa.gr">skliria@ypa.gr</a>
5	Senior Advisor on Mediterranean Wetlands, The MedWet	Mr. Thymio Papayannis, <a href="mailto:thymiop@hol.gr">thymiop@hol.gr</a>
6	Health Authorities	
7	Department of Nature Management Directorate of Environment Planning Ministry of Environment, Physical Planning and Public Works	Mr. Spyros Plessas
8	MedWet Coordinator MedWet Secretariat Athens, Greece	Mr. Adnan Budieri
9	Institute of Inland Waters, Hellenic Centre for Marine Research	Mr. Stamatis Zogaris, or Dr Alkis Economou
10	Institute of Fishery Research, branch of NAGREF (National Agricultural Research Foundation) at Kavala	Dr. Manos Koutrakis
11	Nature Management Section, Ministry of Environment, Physical Planning and Public Works	Ms. Eleni Tryfon, or Ms. Aikaterini Stylogianni
12	University of Patras	Assistant Prof. E.Papastergiadou
13	Water Directorate, Region of West Macedonia, Kozani	Ms. Anastasia Tzangaridou <a href="mailto:penf4w@otenet.gr">penf4w@otenet.gr</a>
14	Head of Chemistry Service, Prefecture of Florina	Mr. Eustratios Koutsoumbidis
15	Hydrologist, National Agricultural Research Foundation, Ag. Anargyri Attikis, Greece	Dr. George Parisopoulos E-mail: <a href="mailto:iamc@ath.forthnet.gr">iamc@ath.forthnet.gr</a>
16	Statistical Service of Florina	Ms. A. Hasou
17	Forestry Service of Florina	Mr. Panagiotis Papaioannou, Forester
18	Prespa National Forest Management Body	Ms. Christina Louka, Forester
19	Aristotle University of Thessaloniki	Prof. Vasilios Papanastasis
20	Technological Educational Institute of	Ass. Prof. Michael Vrahnakis

	Karditsa	
21	Prespa National Forest Management Body	Mr. Nikos Anagnostopoulos, Environmentalist
<b>Local Stakeholders</b>		
22	Municipality of Prespa	Mr. Lazaros Nalpantidis Mayor of Prespa
24	Municipality of Prespa	Ms. Popi Nalpantidou from SPP
<b>Private sector</b>		
8		
<b>NGO</b>		
25	Managing Director, Society for Protection of Prespa, Greece	Dr. Myrsini Malakou, <a href="mailto:spp@line.gr">spp@line.gr</a>
26	Society for the Protection of Prespa, Athens, Greece	Miltos Gletsos, <a href="mailto:m.gletsos@wwf.gr">m.gletsos@wwf.gr</a>
27	NGO for the Protection of Prespa, Greece	Mr. Yannis Kazoglou, <a href="mailto:y.kazoglou@soo.gr">y.kazoglou@soo.gr</a>
28	NGO Society for the Protection of Prespa	Ms. Daphne Mantziou; <a href="mailto:d.mantziou@wwf.gr">d.mantziou@wwf.gr</a>
29	Society for the Protection of Prespa	Mr. Myrsini Malakou Director
30	Hellenic Ornithological Society, Athens	Dr. A. Dimalexis, Conservation Director
31	Environmentalism, Society for the Protection of Prespa	Ms. Anita Logotheti Phone: 0030-23850-51233
32	Society for the Protection of Prespa	Ms. Irene Koutseri, Biologist Phone: 0030-23850-51233 E-mail: <a href="mailto:spp@line.gr">spp@line.gr</a>
33		Dr. George Catsadorakis, Conservation Biologist & Env. Interpretation Specialist, Dadia, GR-68400 Soufli Phone: +30 25540 32491,-32420 (tel. & fax), +30 6974667413. Email: <a href="mailto:catsador@hol.gr">catsador@hol.gr</a>
34		Dr. G. Mertzanis, Biologist, Scientific Coordinator, Callisto, 123 Mitropoleos st. 54621 Thessaloniki
35		Dr. Panagiota Maragou, Biologist, WWF Greece

TTT for the collection, assessment and evaluation of national information in support of the (TDA) and development of a SAP in the Prespa Lakes Basin

---

		Phone: 0030-210-3314893 E-Mail: <a href="mailto:p.maragou@wwf.gr">p.maragou@wwf.gr</a>
36	EKBY, Thessaloniki	Dr. Petros Kakouros