UNITED NATIONS DEVELOPMENT PROGRAMME

Regional Project with participation from the governments of:
Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine

Project Budget Number:
RER/01/G33/A/1G/31

Project Title:
Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem: Tranche 2

Project Short Title:
Black Sea Ecosystem Recovery Project

Executing Agent:
UNOPS

Implementing Agent:
UNOPS

GEF Implementing Agency:
UNDP

GEF Focal area:
International Waters

Summary of UNDP and Cost-Sharing

	Current	Previous	Change
UNDP:			
TRAC (1&2)			
TRAC (3)			
Other (GEF)	$6,000,000		
Regional Program			
Cost Sharing:			
Government			
Financial Inst.			
Sub Total:	**$6,000,000**		
Parallel Financing:	**$5,332,106**		
GRAND TOTAL	**$11,332,106**		

GEF Operational Program:
OP8

GEF Strategic Priority:
IW-1

Project site:
Istanbul, Turkey

Beneficiary Countries:
Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine

Estimated Start Date:
July 2004

Estimated End Date (Tranche 2):
June 2007

Classification Information

ACC sector & sub-sector 0400 – Natural resources 0410 – Water resources planning and development	Primary type of intervention
DCAS sector &sub-sector	Secondary type of intervention
Primary area of focus/ sub-focus	Primary target beneficiaries
Secondary area of focus/ sub-focus	Secondary target beneficiaries

Programme Officer: Nick Remple, Regional Coordinator, UNDP-GEF RBEC

Brief Description

The project in its Tranche 2 will continue supporting the Black Sea regional aspects of the Black Sea Partnership for Nutrient Control. It will assist and strengthen the role of the Black Sea Commission (of the Bucharest Convention for the Protection of the Black Sea against Pollution) and ensure the provision of a suite of harmonised legal and policy instruments for tackling the problem of eutrophication, and release of certain hazardous substances, and to facilitate ecosystem recovery. An important feature of the project is its encouragement of broad stakeholder participation. This will be achieved by inter-sectoral co-ordination, the provision of small grants to local initiatives and support for public information and environmental education. The project will also enable a new suite of indicators for monitoring the effectiveness of the measures taken by the Partnership. These indicators, together with targeted scientific studies, will help to set new regional nutrient control targets within the concept of adaptive management. The PDF-B study has revealed that making a remarkable progress in the attainment of these objectives would require at least a five years of concerted action at the wider basin level. Unfortunately, owing to funding constraints, a two-phased approach had to be taken for the implementation of the overall strategy. Phasing was based on a reconsideration of the relative priorities of achieving certain targets and evaluation of the need for earlier delivery of certain project Outputs which will be essential inputs for the implementation of other activities envisaged for the 5 years integrated project. . The current project will be part of the broader multi-donor Black Sea Environmental Programme and clear mechanisms will be established for donor co-ordination and for co-ordination and the sharing of objectives with the Danube and Dnipro GEF Projects.

On behalf of the Governments of:	**Name**	**Date**	**Signature**
Bulgaria	----------	----------	----------
Georgia	----------	----------	----------
Romania	----------	----------	----------
Russian Federation	----------	----------	----------
Republic of Turkey	----------	----------	----------
Ukraine	----------	----------	----------
On Behalf of:			
UNDP	----------	----------	----------
UNOPS	----------	----------	----------

SUMMARY

1. IDENTIFIERS

PROJECT NUMBER: RER/01/G33/A/1G/31

PROJECT NAME Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem (Tranche 2)

DURATION 3 years (July 2004 – June 2007)

IMPLEMENTING AGENCY UNDP

EXECUTING AGENCY UNOPS

REQUESTING COUNTRIES Bulgaria, Georgia, Romania, Russian Federation, Turkey and Ukraine

ELIGIBILITY Eligible under paragraph 9(b) of GEF Instrument

GEF FOCAL AREA International Waters

GEF PROGRAMMING FRAMEWORK GEF Operational Strategy for International Waters/ Waterbody-Based Operational Programme (#8)

2. SUMMARY

The long-term development objective of the proposed Black Sea Ecosystem Recovery Project (BSERP) is to contribute to sustainable human development in the Black Sea area through reinforcing the cooperation and the capacities of the Black Sea countries to take effective measures in reducing nutrients and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s. The overall objective of the project is to ensure (i) that all of the Black Sea countries take concrete measures (including investment activities) in the eutrophication causing sectors to reduce load of nutrients and hazardous substances on the Black Sea ecosystem and, (ii) that major findings and recommendations of the project have been incorporated in national policies, strategies and, where possible, in national legislation.

The overall objective of the BSERP is to support participating countries in the development of national policies and legislation and the definition of priority actions to avoid that discharge of nitrogen and phosphorus to the Black Sea exceed those levels as observed in 1997. This will require countries to adopt strategies and measures that permit economic development whilst

ensuring the rehabilitation of coastal and marine ecosystems through pollution control and reduction of nutrients and hazardous substances. At the end of the Project Tranche II, it is expected that the institutional mechanism of the Black Sea Commission is reinforced and fully operational ensuring cooperation between all Black Sea countries to efficiently implement joint policies and actions and operate common management and control mechanisms.

Specific objectives of the BSERP from May 2004-April 2007 are (i) to reinforce regional cooperation under the Black Sea Convention, (ii) to set up institutional and legal instruments and to define priority actions at regional and national levels to assure sustainable coastal zone management, (iii) to protect of coastal and marine ecosystems and habitats in order to secure sustainable use of coastal and marine resources. To accomplish these objectives, the project will build up on the results achieved during Tranche I. (Jan 2002-April 2004).

3. COSTS AND FINANCING (USD)

		Project Tranche 1	**Project Tranche 2**
GEF	**Project**	*4,000,000 USD*	**6 000,000 USD**
	PDF-B	*350,000 USD*	
	Subtotal GEF	*4,350,000 USD*	**6 000,000 USD**
Co-Financing	Government/ others	*4,052,366 USD*	**5 332 106 USD**
	Total Project Cost	*8,402,366 USD*	**11 332 106 USD**

4. ASSOCIATED FINANCING (Appendix F)

- Government: $788,976,676 USD
- UNDP: $16,325,000 USD
- Bilateral, EU & NGO: $17,716,802 USD

Total Baseline Costs: $828,371,588 USD

5. GEF OPERATIONAL FOCAL POINT ENDORSEMENTS (Appendix O)

Bulgaria – 10 Feb 2004
Georgia - 5 March 2004
Romania – 9 Feb 2004
Russian Federation – 12 March 2004
Turkey - 19 Feb 2004
Ukraine – 18 Feb 2004

6. IMPLEMENTING AGENCY CONTACT

Mr. Nick Remple

UNDP Regional Bureau for Europe and CIS
Grösslingova 35
811 09 Bratislava, Slovakia
Tel: +421 2 59337-458 / Fax: +421 2 59337-450
nick.remple@undp.org

Preface

In accordance with the outcomes of the previous interventions in the region, the Black Sea Commission (BSC) and the International Commission for the Protection of the Danube River Basin (ICPDR) have initiated contacts on a wider Black Sea basin scale. Accordingly, the BSC received support for the implementation of measures related to eutrophication and the control of hazardous substances, as outlined within the Black Sea Strategic Action Plan. In September 2001, the GEF Council approved Tranche 1 to carry out the first phase of the UNDP/GEF Project "Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem". Although the initial Project Document had been prepared with a total budget of 9.5 million USD, due to funding constraints, the Black Sea Ecosystem Recovery Project (BSERP) was split into two parts (phases) to be funded by two separate tranches. The ICPDR received support, for the Danube Regional Project (DRP) also in two tranches. The two integrated project proposals each require GEF assistance for a total of five years. In addition, a Nutrient Investment Facility will act to develop the mechanism of funding of priority projects identified by the countries in the Black Sea basin as a whole.

The project (BSERP) supports regional aspects of nutrient control in the Black Sea coastal countries. It also aims to strengthen the role of the Black Sea Commission to ensure (i) the formulation, adoption, and implementation of a suite of harmonized legal and policy instruments for tackling the problem of eutrophication and release of certain hazardous substances; (ii) to facilitate ecosystem recovery, including through sustainable use of living marine resources, and (iii) to encourage broad stakeholder participation. This will be achieved by inter-ministerial consultations, provision of small grants to local initiatives, support for release of information to the public and environmental training/education. The project will employ a new set of indicators for monitoring the effectiveness of the measures taken by the countries. These indicators, together with targeted scientific studies, will help to set new regional nutrient control targets and to adopt action plans which will be implemented through an adaptive management scheme. Although a two-years phased approach had to be taken for the implementation of the overall strategy owing to funding constraints, a remarkable progress in the attainment of these objectives would require at least a five years of concerted action at the wider basin level.

The GEF Black Sea/Danube Basin Strategic Partnership shall provide assistance to the BSC and ICPDR to reinforce their activities in terms of policy/legislative reforms and enforcement of environmental regulations (with particular attention to the reduction of nutrients and toxic substances). The regional projects, individually and jointly, will facilitate a coherent approach for policy and legislative measures to be introduced by the participating countries at the national, regional and wider basin levels. The two regional projects, and the Nutrient Investment Facility shall cross-fertilise each other through *inter-alia*, demonstrating the efficiency and environmental effectiveness of laws and policies to be introduced by the regional projects in investment projects implemented under the Nutrient Investment Facility, thus enhancing their replicability; elaborating and implementing the most suitable and feasible mix of management instruments; highlighting the significance of certain interventions/investments, in terms of environmental-economic costs and benefits.

Rationale for Receiving the Tranche 2 Funding of the BSERP

Because of the decision to split the BSERP into 2 Phases, it is critical that the 2nd tranche of funding be made available in time to assure continuity between the two phases. Phase 1 of the BSERP began officially in April 2002 and will be concluded by April end 2003. As of February 2004, 22 of the 27 components of Phase 1 are under implementation, with the vast majority (16) carrying on through into Phase 2. For practical reasons, 5 of the activities that could not been started in Phase 1 will be initiated in Phase 2.

In a similar fashion to the DRP, Phase 1 of the BSERP was designed as to prepare concepts, methodologies, policies, capacity building etc. that will be implemented in Phase 2. Therefore, to assure full project implementation and to achieve the ultimate goals of the Black Sea Ecosystem Project in its entirety (both Phases), this Project Document for Phase 2 of the BSERP is being submitted for the remaining funding (2nd tranche).

Progress in the Implementation of Phase 1 of the BSERP

The first year of implementation of the UNDP/GEF first phase has been assessed as "unsatisfactory" in the latest APR/PIR Review (April 2003) (see Appendix L for the full APR/PIR.). This assessment may appear debatable since many of the project activities were initiated only after the replacement of the Project Coordinator during July 2003. The implementation schedule of BSERP activities were re-planned during July 2003 to deliver the expected results of Phase 1, with a minimum of activities transferred to Phase 2. As an indication, the Tranche 2 proposal contains a table (Table 27) developed to demonstrate progress and results expected by the end of Phase 1. This table is based on the Objectives/Outputs/Success Criteria table that formed part of the original Framework Brief–GEF Strategic Partnership on the Danube/Black Sea Basin.

The outputs of the current Phase 1 activities will set the basis for full implementation in Phase 2 to achieve the desired objective of the BSERP. In coordination with the DRP, EU policies (agriculture, industry, municipalities, coastal wetland management etc.), economic assessment, pilot activities etc. are currently being prepared for operation in Phase 2. Coastal zone management planning tools (related to the EU WFD for transitional and coastal waters) will also be initiated during Phase 2. Concepts for improving BSC systems (water quality, accident prevention and warning, emissions, etc.) are being developed and the information system (BSIS) is being enhanced, whereas training needs are being assessed, prioritized and then programmes developed as the basis for specific activities for improvement in Phase 2.

Public participation mechanisms are being developed or strengthened (via 'Umbrella' NGO networks), activities at the local and regional level for pollution reduction are being prepared (Small Grants Programme) and public awareness activities are being organized (BSERP Communications Strategy.) Finally, appropriate monitoring and evaluation systems, according to GEF policies, are being designed and put in place such that progress can be measured by the end of Phase 2.

In summary, the implementation of Phase 1 activities has progressed as follows:

Objective 1: Support the integration of a sustainable Secretariat for the Bucharest Convention

Support has been given to the work of Advisory Groups through project staff and consultants. A survey was undertaken to evaluate the data gathering, assessment and exchange capacity and needs of Advisory Groups and Activity Centres. The institutional set-up of the Black Sea Commission's framework is strengthened by the involvement of additional resources both human and financial.

A task force (DABLAS Task Force) was established as a platform for common decision-making and encouraging investments for environmental protection, in particular for reduction of eutrophication. BSERP participates in the process. A Joint Technical Working Group was also established with the mandate to develop harmonized monitoring systems, common assessment of the ecological status of inputs of nutrients and other hazardous substances, compatible reporting formats for input loads and the assessed ecological status, and formulate of appropriate measures to limit discharge of nutrients.

In relation to the production of public awareness material, the PIU has been responsible for publishing the 'Popular version of the Blacks Sea SAP' in Bulgarian, Turkish and, Romanian, languages[1]. The newsletter 'Black Sea Shared' was also published in English and posted on web in all local languages. A table-top calendar for the promotion of the Black Sea Environmental programme and introducing partners in the process was published for 2003. A reference book for coastguards, fishing communities are currently under preparation. A web page for the project had been developed and upgraded continuously, providing information on project related activities and a modern means of communicating with partners.

Objective 2: Regional actions for improving LBA legislation to control eutrophication and for tackling emergent problems

An in-depth study and stakeholder consultations at the national and regional levels by the UNEP/GPA team on existing legislation, policies and practices, and identification of gaps and prospects for change was delayed until recently due to limited data availability. Before suggesting commitments for the region and individual countries, the analysis and planning process must be undertaken by the UNEP/GPA, taking full account of economic, social, and political realities of the region such as the EU accession. This in-depth study is currently underway. Further cooperation on the initiatives of the EU has been coordinated for the latter half of Phase 1 and for Phase 2 with the DRP.

The study of emergent issues in the Black Sea and their social and economic root causes based on application of the GIWA methodology was also delayed during Phase 1. This was due to a lengthy disagreement of the planned activities of the GIWA team by the Permanent Secretariat who regarded the inadequacy and validity of data as a major constraint to the overall assessment. This activity is currently underway following a decision of the Project Steering Committee for

[1] English, Russian and Ukrainian were published previously

the PIU to employ governmentally approved national consultants to provide the necessary data on behalf of the GIWA team.

Objective 3: Assist countries to improve their knowledge of the process of eutrophication in the Black Sea

An Advisory Board composed of select scientists from coastal countries was established with a view to prepare the research programme for the International Study Group (ISG). The Advisory Board evaluated 79 international proposals. Selected representatives of the chosen research projects met in January 2003 for the 1st meeting of the ISG in order to prepare the first draft of the research plan. Three separate research cruises were agreed upon and planned by the ISG in detail. Other research activities, which are currently underway, include (i) the extended monitoring of nutrients (organic and inorganic) and hazardous substance inputs to the Black Sea from the Danube river, (ii) remote sensing (historical and current) using SeaWifs in combination with the research surveys to determine the necessary algorithms required to accurately calculate the level of chlorophyll a (phytoplankton growth) by satellite, add (iii) shore-based investigation of macrophytes (incl. workshop and training programme for regional representatives). The first of the research cruises (benthic survey) was carried out successfully during September/October 2003. A pelagic research cruise planned for September/October was postponed until March/April 2003 (Phase 1) due to difficulties in signing contract with a local vessel. A further cruise is planned for winter 2004.

Objective 4: Introduce new sectoral policies and laws, and a system of process, stress reduction and environmental status indicators for monitoring the effectiveness of measures to control eutrophication (and harmful substances where appropriate)

The project suffered a delay in reaching an agreement on the methodology to be applied for analysing the relevant economic sectors (see also 2 above) and formulating measures for the reduction of nutrients and hazardous substances. Implementation of this activity was revised in late 2003. A number of interventions have been planned for initiation during the latter part of Phase 1. These include an agreement with the DRP on joint project implementation and the set up an institutional framework of the project implementation, which will strengthen the present cooperation and eventually lead to setting up of national and coastal inter-sectoral committees.

Environmental status indicators suggested in PDF-B phase were introduced to different Advisory Groups of the BSC for their review and feedback. The BSC Secretariat subsequently elaborated draft indicator-based reporting formats for continuous formal reporting to the BSC. BSERP provided support to the BSC in implementing of the reporting and developing a proper storage and retrieval means as a part of the Black Sea Information System (BSIS). Along with this, the BSERP has also planned a 10 years historical data (environmental and socio-economic) compilation exercise which will be used for setting the background and justifying the validity of the final set of indicators to be adopted. The BSERP on its part is currently developing the architecture for relational databases in which the results of the data collation exercise will be entered. The databases will be accessible through the internet.

With the support of the BSERP, the basic approach for integrated monitoring and assessment programme for Black Sea (BSIMAP) has been established by the PS of the BSC. A pilot monitoring programme for environmental status indicators, as agreed by the JTWG of the BSC and the ICPDR, has also been designed and is currently underway. The environmental status indicators will be assessed by the PIU for their 'fitness-for-purpose' in the Black Sea region.

Objective 5: Support the Commission in their periodic review of Adaptive Management objectives.

This activity in Phase 1 is represented by cost-benefit analysis of the national strategies for reduction of nutrients and hazardous substances. Since the national strategies will not completed until midway through Phase 2 (in association with the DRP), this activity is planned accordingly.

Objective 6: Assist the public in implementing activities to reduce eutrophication through a programme of grants for small projects and support to regional NGOs.

In relation to the Small-Grants Programme (SGP), 17 projects totalling 320,000 USD were sub-contracted in December 2002-January 2003 with completion dates of December 2003. A strategy for the second call has been drafted and is currently under discussion. Following its adoption by the NGO communities, a second call will be made in early 2004.

A directory of Black Sea wetlands was prepared by international (Wetlands International) and local (NGOs) partners together with detailed recommendations on wetland conservation. A number of activities were held by NGOs on the International Black Sea Day, supported by the PS/PIU through press releases issued in all local languages, the newsletter published in English and posting on web on local languages. Preparations are also under way for making a video movie to acknowledge local populations with their ecological and economical significance. In relation to environmental education, measures were instigated to enrich the local character of the scientific contents of an education draft study pack. This was carried out to better coordinate with national education authorities operating in the region. The education study pack will be finalized and published in the latter part of Phase 1 (early 2004).

There was a delay in the operation of the Black Sea Train Sea Coast course development for agricultural management of nutrients in coastal regions. Completion of course planned for end 2003 with first delivery in the Black Sea coastal region in March 2004.

Objective 7: Formulate proposals for market-based or alternative economic instruments for limiting nutrient emissions and establish private-public sector partnerships for environmental protection in the Black Sea.

The methodology for environmental and economic analysis developed during Phase 1 will be further developed in Phase 2 in association with the DRP. A detailed analysis of existing international and regional economic instruments for nutrient reduction was successfully carried out during Phase 1 of the BSERP. Activities have also been initiated in a number of riparian countries in the field of public-private sector partnership. The first phase has concentrated on (i) the analysis of the relevant stakeholders in the Black Sea riparian countries, (i) the legal base in each country and (iii) recommendation for future partnerships.

An updated priority investment portfolio prepared as part of (by technical and financing sub-committees) DABLAS Task Force established by the BS and Danube Commissions and supported by the EC. A separate activity was also initiated by the BSERP to determine the potential of the local and/or regional financial intermediaries as a means of channeling funding to small/medium sized bankable projects related to nutrient limitation and habitat restoration.

Objective 8: Fisheries exploited within its maximum sustainable yield and incorporating measures to protect ecologically sensitive areas.

A background document, prepared with support from the BSERP for the Activity Group on fisheries, suggested the main management and conservation issues that need to be incorporated in a regional fishery management strategy. With a view to study the status and trends, a regional data compilation and evaluation exercise was undertaken. Results were evaluated and a realistic set of indicators for ecosystem-based fisheries have been devised. As a pilot activity, demersal resources were studied in depth. Coordination with international expert institutions (FAO-GFCM) for the inclusion of a regional coordinated stock assessment in GFCM work-programme was made and a proposal was drafted for submission by countries' fisheries authorities to FAO. A guidebook on Responsible Fisheries in the Black Sea to be published in all local languages and widely distributed to the local managers, fishermen and public is under preparation

Issues to Be Considered for Tranche 2

The BSERP will, in cooperation with the DRP, support the implementation of the EU WFD in relation to the project objectives. A major challenge for Phase 2 implementation will be to assure that non-EU Accession countries can participate in implementing the EU WFD. The BSERP will act to strengthen the countries' abilities to participate on an equal basis within a regional framework. Phase 2 will continue to focus on priorities for capacity building in the Black Sea riparian countries, focusing on the most central needs within the BSC and its Permanent Secretariat, the NGOs and other key stakeholders. The BSERP will also provide relevant support to ensure that the 'grassroots' NGOs and NGO networks are strengthened in their capacities to take action and mobilize support for pollution reduction in the coastal zone.

Short Description of the Project Document

The relationship between the activities described in the original framework (December 2001) and the Project Document for Tranche 2

In order to meet the current needs of the Black Sea Commission, the Phase 2 of the BSERP has been slightly modified from the original project document. However, the original text of the Project Document has been principally retained to assure authenticity as this brief has already been endorsed by all Black Sea countries. Revisions were made to the original project activities of Phase 2 in order: (i) to reflect changing situations in the region, i.e. the implementation of the EU WFD and the Marine Strategy, (ii) to respond to the lack of involvement of beneficiaries by the creation of new institutional arrangements for project implementation in each of the six countries, and (iii) to reinforce cooperation with the DRP for activities related to policy guidelines, legal and institutional instruments for reduction of nutrients and hazardous substances from land-based sources. The DRB are currently in the process of agreeing relevant measures for Bulgaria, Romania and Ukraine. The BSERP will act to extend these activities in Georgia, the Russian Federation and Turkey.

B. Outputs planned for Phase 2

Phase 2 of the BSERP contains 16 project components with 85 activities. The following immediate outputs are designed to respond to the overall development objective:

- Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention;
- Development of policy guidelines, legal and institutional instruments for nutrient reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones;
- Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems;
- Development of operational systems for monitoring, information management and research under the Black Sea Convention;
- Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme).

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List of Abbreviations

Abbreviation	Definition/Explanation
ACCOBAMS	The Agreement on Conservation of the Cetaceans of the Black Sea, the Mediterranean Sea and the contiguous Atlantic area
AG	The Advisory Group of the Black Sea Commission
AG CBD	The AG of the Black Sea Commission on Conservation of Biological Diversity
AG ESAS	The AG of the Black Sea Commission on Environmental Safety Aspects of Shipping
AG FOMLR	The AG of the Black Sea Commission on Fisheries and Other Marine Living Resources
AG ICZM	The AG of the Black Sea Commission on Integrated Coastal Zone Management
AG LBS	The AG of the Black Sea Commission on Land Bases Sources of Pollution
AG PMA	The AG of the Black Sea Commission on Pollution Monitoring and Assessment
APR	Annual Project Review
ARENA	A Regional Capacity Building and Networking Programme to Upgrade Monitoring and Forecasting Activity in the Black Sea Basin, Financed by the EU
BAP	Best Agricultural Practices
BAT	Best Available Technology
BOD	Biological Oxygen Demand
BSC	(Istanbul) Commission for the Protection of the Black Sea Against Pollution (the body responsible for the implementation of the Bucharest Convention)
BSEC	Black Sea Economic Cooperation
BSEEP	Black Sea Environmental Education Project
BSEP	Black Sea Environmental Programme
BSERP	The Black Sea Ecosystems Recovery Project
BSIMAP	The Black Sea Monitoring and Assessment Programme of the Black Sea Commission
BSIS	The Black Sea Information System
BSSAP, BS-SAP	The Black Sea Strategic Action Plan
CEC	Commission of European Communities (European Union)
CIEI	Coastal Zone Industrial Emission Inventory
COD	Chemical Oxygen Demand
CPBSAP	The Convention on Protection of the Black Sea Against Pollution
CTA	Chief Technical Adviser
DABLAS	The Danube Black Sea Task Force (Investment Projects)
DANUBIS	Danube Information System
DANUBS	The project daNUbs 'Nutrient Management in the Danube Basin and its Impact on the Black Sea'
D-BS JTWG	The Danube-Black Sea Joint Technical Working Group
DPSIR	Driving-Force, Pressure, Status, Impact and Response indicators
DRP	The GEF UNDP Danube Regional Project
EEA	European Environmental Agency
EIA	Environmental Impact Assessment
ELME	The European Lifestyles and their effect on Large Marine Ecosystems. EU 6th Framework Research Project

Abbreviation	Definition/Explanation
EMIS EG	Emission Expert Groups of the ICPDR
EU Tacis	EU Programme on Technical Assistance to CIS countries (EuropeAid)
ExecSumm	The Executive Summary of BSERP Tranche 2 ProDoc
FAO	Food and Agriculture Organisation of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEF LEARN	Learning Exchange and Resource Network
GFCM	General Fisheries Council for the Mediterranean
GIS	Geographic Information System
GIWA	The Global International Waters Assessment
GOOS	The Global Oceanographic Observation System
GPA	The Global Programme of Action
HELCOM	The Helsinki Commission
ICPDR	The International Commission for the Protection of the Danube River
ICZM	Integrated Coastal Zone Management
IFI	International Financial Institution
IMO	International Maritime Organisation
IOC of UNESCO	Intergovernmental Oceanographic Commission
ISG	Ad-hoc International Study Group for eutrophication in the Black Sea (established by the PIU)
ISPA	Instrument for Structural Policies for Pre-Accession
IW	International Waters
JPMG	Joint Project Management Group (for the project between the BSC and the IAs/donors)
JRC	Joint Research Centre
JWG	Joint Working Group of the ICPDR and BSC (may be extended to the Dnipro Comm. etc.)
LBA	Land Based Activities
LBS	Land Bases Sources of Pollution
M&E	Monitoring and Evaluation
MOE	Ministry of the Environment (exact title and status varies between countries)
MoU	Memorandum of Understanding
MPA	Marine Protected Area
N	Nitrogen
NATO	North-Atlantic Treaty Organisation
NGO	Non-Governmental Organisation
NPC	National Project Coordinator appointed by the respective Governments
OECD	Organisation for Economic Co-operation and Development
OP	GEF Operational Program
OSPAR	The Oslo and Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
P	Phosphorus
P, SR, and ES	Process, Stress Reduction and Environmental State indicators
PABSEC	Parliamentary Assembly to the Black Sea Economic Cooperation
PCU	Programme Coordinating Unit

Abbreviation	Definition/Explanation
PDF-B	Project Development Facility of the GEF
PIR	Project Implementation Review
PIU	Project Implementation Unit of the current project
PMS	Project Management Sheet
PPP	Private Sector Public Partnerships
PPS	Public Participation Specialist
ProDoc	Project Document for Tranche 2
PS	Permanent Secretariat of the Black Sea Commission
QA/QC	Quality Assurance and Quality Control
RAC	The Regional Activity Centre of the Black Sea Commission
SAP	GEF Strategic Action Programme
SAPARD	Special Accession Programme for Agriculture and Rural Development
SC	Steering Committee established for the execution of the current project
Sectoral Focal Point	Person or persons specifically responsible for this programme within a given national sector
SGP	Small Grants Programme within BSERP Tranche 1 and Tranche 2
SIA	Significant Impact Areas
SOP	laboratory Standard Operating Procedures
STAP	GEF Scientific and Technical Advisory Panel
TDA	Transboundary Diagnostic Analysis
Technical Focal Point	Person or institution responsible for providing national specialist input to a given Advisory Group
TOR	Terms of Reference
Train-Sea Coast	TRAIN-SEA-COAST Programme funded by the GEF
UNDOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
UNDP-COs	Country Offices of the United Nations Development Programme
UNDP-GEF	UNDP – GEF Unit
UNEP	United Nations Environment Programme
UNOPS	United Nations Office for Project Services
VTOPIS	Black Sea Vessel Traffic Oil Pollution Information System
WB	World Bank
WFD	The Water Framework Directive of the EU
WHO	World Health Organisation
WMO	World Meteorological Organisation
WWF	World Wide Fund for Nature
WWTP	Waste Water Treatment Plant

1 BACKGROUND INFORMATION

1.1 General

1.2 Context of the Black Sea Ecosystem Recovery Project

1. Following the signing of the Convention for the (Bucharest) Convention on the Protection of the Black Sea Against Pollution in 1992, international support was provided to the Black Sea coastal states for facilitating the implementation of the Convention. The UNDP/GEF, through the Black Sea Environmental Programme which consists of two consecutive regional projects implemented between 1993 - 1998, has been instrumental in helping to convert the political commitment made by the Convention to regional action. The European Community (through its Phare and Tacis Programmes) and a number of other bilateral donors provided additional support to this regional initiative, which broadened the coverage of the Bucharest Convention to sustainable development of the marine and coastal areas of the Black Sea, and enhanced the regional management capacity. During this period, the regional coordinating organ envisaged by the Convention (Black Sea Commission and its Secretariat) also became operational and is currently exercising its legal and political authority and responsibilities.

2. GEF intervention enabled identification of environmental problems threatening the Black Sea marine and coastal ecosystems; elaboration of a Transboundary Diagnostic Analysis (TDA) - which not only indicated the problems beyond national jurisdictions, but also their root causes as well as actions proposed to eliminate them-, adoption of the Strategic Action Plan for the protection and Rehabilitation of the Black Sea; development of National Action Plans compatible with the regional SAP; establishment of a regional network of institutions responsible for further developing and implementing different components of the Plan; enhancing the capacity of these institutions for better environmental management through training and policy analysis / development; and elaboration of a list of projects consisting of largest domestic &industrial waste water sources and of all sources emitting toxics in coastal countries (hot spots analysis), out of which a portfolio of 49 investment projects[2] of regional significance[3] was also prepared. It was calculated that implementation of these investments which comprise of construction of new facilities, extension, rehabilitation/upgrading of existing infrastructure, in-plant precautions, would reduce the pollution emerging from the coastal states to a very high extent. The respective data are reflected in the tables below.

[2] Bulgaria 9, Georgia 6, Romania 6,Russian Federation 8, Turkey 10, Ukraine 10

[3] Transboundary effects of these hot spots include diminishing of the water quality, decline in productive capacity and fisheries, destruction of wetlands, of habitats of fauna, of migratory fauna, landscape destruction, accidents causing transboundary pollution, tourism losses, health hazards etc.

Table 1 The Estimated Input of Total Nitrogen into the Black Sea [1]

Country	Inputs, thousand tons per year			
	Domestic	Industrial	Riverine	Subtotal
Bulgaria	2.5	71.0	19.2	92.7
Georgia	0.9	44.4	132.0	177.3
Romania	9.5	31.0	36.3	78.6
Russian Federation	0.4	0	62.3	62.7
Turkey	1.6	0	0.0	1.6
Ukraine	5.4	0.6	32.0	38.0
Other countries				198.3
Subtotal	20.3	146.9	281.8	647.3

Table 2 The Estimated Input of Total Phosphorus to the Black Sea [1]

Country	Inputs , thousand tons per year			
	Domestic	Industrial	Riverine	Subtotal
Bulgaria	0.7	0.0	1.9	2.6
Georgia	0.3	0.3	11.111.6	
Romania	2.6	1.7	5.79.9	
Russian Federation	0.5	0.0	6.16.6	
Turkey	0.4	0	00.4	
Ukraine	2.2	0.1	3.6	5.9
Other countries				13.6
Subtotal	6.7	2.0	28.2	50.5

3. On the other hand, the TDA has indicated that 30 % percent of the nutrients (mainly nitrogen and phosphorus compounds) which causes the most severe problem of the Black Sea in terms of its coverage and impacts on ecosystems, eutrophication, was emerging from countries other than the coastal ones which are located in the wide water catchment basin of the Black Sea.

4. In accordance with the Outputs of the previous interventions in the region, the Black Sea Commission and the International Commission for the Protection of the Danube River Basin have initiated the first contacts on a wider Black Sea basin scale, and have received GEF PDF-B funding with a view to further develop legal, policy and technical measures to reduce the discharges of nutrients and other toxic substances in the Danube and in the Sea itself. The projects that have been thus prepared are comprehensive of reduction of pollution from point and non-point sources, conservation of wetlands, floodplains, and critical marine habitats (in particular fisheries spawning and nursery areas), setting of water quality standards, prevention of accidental pollution, floods and river basin management. The two integrated project proposals requiring GEF assistance for a total of five years, and accompanying investment support shall complement the activities of the BSC and the ICPDR.

5. The new GEF assistance, i.e. Black Sea -Danube River Basin Strategic Partnership was designed as three complementary components:

a) Two Regional Projects for the Black Sea and the Danube River Basin which will be implemented in two Phases between (2002- 2003) and (2004- 2006);

b) A series of country-related investment projects executed through the World Bank-GEF Nutrient Investment Facility;
c) Other GEF and donor interventions in the basin targeting reduction of nutrients/toxic pollutants and restoration of critical habitats.

6. The GEF Black Sea/Danube Basin Strategic Partnership provides assistance to the BSC and ICPDR to reinforce their activities in terms of policy/legislative reforms and enforcement of environmental regulations (with particular attention to the reduction of nutrients and toxic substances). The regional projects, individually and jointly, facilitate a coherent approach for policy and legislative measures to be introduced by the participating countries at the national, regional and wider basin levels. The two regional projects, and the Nutrient Investment Facility cross-fertilize each other through inter alia, demonstrating the efficiency and environmental effectiveness of laws and policies to be introduced by the regional projects in investment projects implemented under the Nutrient Investment Facility, thus enhancing their replicability; elaborating and implementing the most suitable and feasible mix of management instruments, including the economic instruments; highlighting the significance of certain interventions – investments - in terms of environmental-economic costs and benefits etc.

7. Through the PDF-B funding a comprehensive project proposal of 5 years duration aiming to address the three highest priority transboundary problems of the Black Sea (namely eutrophication, discharge of toxic substances including oil, loss of critical benthic habitats and wetlands) and to highlight emerging ones was prepared. However, due to funding constraints experienced by the GEF, the Black Sea Ecosystem Recovery Project proposal, alike the Danube River Basin Project was split into two implementation Phases. The third component of the Strategic Partnership, the Nutrient Investment Facility was also phased -into three- owing to the same funding constraints. The implementation schedule adopted for the Strategic Partnership was as follows:

- May 2001 tranche- Black Sea regional project: Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem: Phase I. 2 year technical assistance, with a budget of 4,000,000$ (excluding the PDB-B funding of 349,920$); First envelope of Nutrient Investment Facility (Black Sea and Danube basin countries): 20 million $.
- December 2001 tranche - Second envelope of Nutrient Investment Facility: US$ 25 million.
- May 2002 tranche- Black Sea regional project: Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem: Phase 2, consisting of 3 years technical assistance, with a budget of 5,555,000 $.
- November 2002 tranche- Third envelope of Nutrient Investment Facility: US$ 25 million.

8. In phasing the comprehensive Black Sea regional project prepared under the PDF-B and submitted for the November 2000 Council Meeting, the total duration (2 years followed by 3 years, in total five years), and the total budget of the regional project (with $349,000 for PDF-B, $4,000,000 for Phase I, and 5,555,000 for Phase 2 have been left as same. The immediate objectives, planned activities and expected Outputs that are included in the original proposal

have also been preserved, but were distributed among the two phases taking the following concerns into consideration:

- Logical sequencing of tasks (such as postponing the tasks that require the availability of the products of earlier activities as input, and vice versa);
- Compatibility with the Commission's own work-programme and the need for responding to its immediate needs;
- Not distorting the budgetary allocations made in the original proposal for various project components;
- Achieving concrete results in the first phase which the Commission's network itself would be able to sustain onwards and which would be further enriched and replicated during the second phase.

9. Effective implementation of the first phase of the project which was approved by the GEF Council at its 9-11 May 2001 meeting, timely delivery of its Outputs, enhanced commitment of the beneficiary countries at the national as well as at the regional level are the most important factors which will contribute to the achievement of the long term objective of reducing the levels of nutrients and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s. These are at the same time basic indicators which will warrant GEF and other donor support following the completion of the first phase.

1.2.1 The Black Sea Basin

Black Sea in Figures:	
Geographical Coordinates	46°33' - 40°56' N. and 27°27'-41°42' E.
Drainage Area	2 000,000 km2
Total Shoreline:	4 340 km
Bulgaria	300 km
Georgia	310 km
Romania	225 km
The Russian Federation	475 km
Turkey	1400 km
Ukraine	1628 km
Area of Water Surface	432000 km2
River inflow	340,6 km3
Water volume	547 000 km3
Maximal depth	2,212 m
Salinity	18 % o - 22% o
Average fresh water balance	3.7 - 441 km3
Black Sea biological species	
Fungi, algae, higher plants	1,619
Invertebrates	1,983
Fishes	168
Marine mammals	4

10. The Black Sea is the most isolated from the World Ocean - connected to the Oceans via the Mediterranean Sea through the Bosphorus, Dardanelle and Gibraltar straits and with the Sea of Azov in the northeast through the Kerch Strait. The ratio of its surface and its catchment area exceeds 6. For this reason, the Black Sea is very vulnerable to pressure from land based human activity and its health is equally dependent from the coastal and non-coastal states of its basin.

11. The large European rivers, the Danube, Dnieper and Don via the Sea of Azov, flow into this sea but its only tenuous link with other seas is with the Mediterranean through the Bosphorus Strait, the Sea of Marmora and the Dardanelle. The Bosphorus is essentially a narrow elongated shallow channel approximately 31 km long, with a width varying between 0.7-3.5 km and a depth of 39 to 100 m.

12. The main rivers: Rioni, Kodori and Inguri Chorokh, Kyzyl-Irmak, Eshil-Irmak, Sakarya, Southern Bug and Dnister also flow into the Black Sea. The seabed is divided into the shelf, the continental slope and the deep-sea depression. The shelf occupies a large area in the north-western part of the Black Sea, where it is over 200 km wide and has a depth ranging from 0 to 160 meters. In other parts of the sea it has a depth of less than 100 m and a width of 2.2 to 15 km. Near the Caucasian and Anatolian coasts the shelf is only a narrow intermittent strip.

13. The thin upper layer of marine water (up to 150 m) supports the unique biological life in the Black Sea ecosystem. The deeper and more dense water layers are saturated with hydrogen sulphide, that over thousands years, accumulated from decaying organic matter in the Black Sea. Due to the unique geomorphologic structure and specific hydrochemical conditions, specific organisms, basically on the level of protozoa, bacteria, and some multi-cellular invertebrates inhabit the deep-sea waters. Knowledge about biological forms of life in the deep waters of the Black Sea is very limited. The disturbance of the natural balance between the two layers could trigger irreversible damage to the people and ecosystem of the Black Sea (Source: State of the Environment of the Black Sea 1996-2000. Publication of the Commission on the Protection of the Black Sea Against Pollution, Istanbul 2002).

14. Isolation from the flushing effects of the open ocean, coupled with its huge catchment, has made the Black Sea particularly susceptible to eutrophication (the phenomenon that results from an over-enrichment of the sea by plant nutrients). Eutrophication has led to radical changes in the Black Sea ecosystem in the past three decades with a major transboundary impact on biological diversity and human use of the sea, including fisheries and recreation. The North Western shelf of the Black Sea for example, was converted from a unique system based upon rich and extensive beds of red algae and bivalves, to an anoxic "dead zone", the seasonal occurrence of which persists until present time. The nitrogen and phosphorus compounds triggering eutrophication come from all over the Black Sea Basin. The Black Sea Transboundary Diagnostic Analysis (1996) indicates that, in 1992, 70% of the nutrients were coming from the six Black Sea countries (three of which - Romania, Bulgaria and Ukraine - discharge much of their nutrient load through the Danube) and the remaining 30% comes from the non-coastal countries, mostly of the upper Danube. Studies by the Danube Basin Environmental Programme suggest that about half the nutrients discharged to the river are from agriculture, one quarter from industry and a similar proportion from domestic sources. The current loads of nutrients entering the Black Sea from the Danube has fallen in recent years due to the collapse of the economies of most lower Danube and former Soviet countries, the measures taken to reduce nutrient discharge in the upper Danube countries, and the implementation of a ban in polyphosphate detergents in some countries. Current phosphate levels appear to be roughly the same as in the 1960s but total nitrogen levels are still at least four times as high as those observed during that period. There is evidence of some recovery in Black Sea ecosystems but these observations lack scientific rigour owing to the collapse of infrastructure to monitor and evaluate changes in the system. It is widely considered however, that nutrient discharges are likely to rise again with consequent damage to the Black Sea, unless action is taken to implement nutrient discharge control measures as part of the economic development strategies. A brief description of the main root causes and action areas is presented in Table 3 below.

Table 3 The Main Root Causes and Action Areas [1]

Perceived major problems	Transboundary elements	Main Root Causes *	Action areas
Decline in Black Sea Commercial Fish Stocks	Virtually all fisheries resources are shared or trans-zonal [straddling] and management requires the effort of more than one country	**1,2,5** *3,4*	**B,** *A, C*
Loss of habitats, notably wetlands and shelf areas, supporting important biotic resources	Biotic resources are often mobile or migratory. Wetlands provide nursery grounds and may also assimilate transboundary pollutants	**1,2,3,4, 5**	**B,** *A,C*
Loss or imminent loss of endangered species and their genomes	Endemic and/or rare species are of regional and global significance.	**1,2,3, 4,5**	**B,** *A,C*
Replacement of indigenous Black Sea species with exotic ones	Exotic species are a global transboundary problem. Entire Black Sea affected and may become vector for extra-regional contamination	**1,2,4,5**	**A,B**
Degradation of the Black Sea landscape	Reduction of regional value of Black Sea tourism.	**2,3,4,5**	**A,B,C**
Inadequate protection of marine and coastal resources from maritime accidents	Black Sea coastlines are short and transboundary pollution is highly likely following accidental spills.	**1,2,3,5**	**A**
Unsanitary conditions in many beaches, bathing waters and shellfish-growing areas	Transboundary human health problems from exposure. Region-wide loss of revenue.	**1,2,3,4, 5**	**B,C**

Main root causes	
1 *Poor legal framework at the regional and national level*	• Poorly defined environmental laws and regulations • Regionally incompatible laws and regulations • Ineffective EIAs/ Environmental audits
2 *Inadequate implementation of available regulatory instruments*	• Inadequate compliance and trend monitoring • Lack of international coordination • Ineffective inspectorates
3 *Inadequate planning at all levels*	• Poorly planned urban/ industrial/ recreational/agricultural development • Poor inter-sectoral coordination
4 *Insufficient public involvement*	• Inappropriate erosion control • Inefficient contingency plans • Lack of general awareness of environmental issues • Deficient public participation Apparent lack of transparency • Poor identification of stakeholders/ rights of access
5 *Inadequate financial mechanisms and support*	• Ineffective economic instruments • Unsustainable subsidies Low value assigned to environment within national economic policies • Poor perception of opportunities for development

Areas where action is proposed	
A *Control of pollution*	• Assessment of the discharge of chemical and micro-biological contaminants to coastal and marine areas • Monitoring of the levels and effects of pollutants for compliance and for long-term trends • Location of hot-spots and options for remedial action. • Reduction and regulation of operational discharges from point sources, vessels and by dumping. • Prevention of emergencies and contingency planning
B *Living resources management*	• Commercially exploited resources • Biodiversity protection • Protection of habitats and landscape
C *Sustainable human development*	• Improving land use planning in urban and industrial areas • Development of sustainable tourism and aquaculture • Involving the public in environmental decision-making

15. Failure to tackle the problem of eutrophication in a holistic manner would severely constrain future development in the region. Activities such as tourism development, fisheries, public health, are intimately related to the quality of shared marine waters. Resolving the problem is not merely a matter of reducing the discharge of nutrients but involves protective measures to help vital ecosystems to become re-established, fisheries and other living resources to be exploited in a sustainable manner and chemical contamination to be strictly controlled. The present project adopts the necessary integrated strategy and is a vital component in a wider GEF Black Sea Basin Strategic Partnership that includes separate GEF interventions in the Danube and the Dnipro, a number of biodiversity projects and the World Bank GEF Nutrient Investment Facility (to provide the necessary support for key investment actions).

1.2.2 Political, Demographic and Economic Issues

16. The Black Sea coastal zone is densely populated with approximately 16 million inhabitants and with 4 million tourists visiting the seacoast in summer seasons. For all Black Sea coastal zones except of Turkey, the demographic trends are negative.

Table 4 The Population of Black Sea Costal Zone and Black Sea Basin, 1997-1999 [1]

Country	Costal Population*	Basin Wide Population
	Black Sea Coast	Black Sea Basin
Bulgaria	714,000	
Georgia	650,000	2,000,000
Romania	745,954	
Russian Federation	1,159,000	18,288,000
Turkey	6,700,000	17,998,440
Ukraine	6,800,000	47,412,000
Total	**16,768,954**	

17. A few decades of inadequate management of marine resources and pollution from the economic activities by the population in the Black Sea basin destroyed the ecosystem of the Black Sea and drastically reduced its biological resources.

18. The analysis of economic data shows a positive trend of stable growth of GDP in six the Black Sea riparian countries. The annual growth of GDP in these countries in year 2002 was 4.3% for Bulgaria, 5.4% for Georgia, 4.3% for Romania 4.3%, 4.3% for Russian Federation, 7.8% for Turkey and 4.5% for Ukraine (Source: The World Bank Group). From other prospective, these countries of the Black Sea region are facing serious economic and financial problems in responding to the objectives of the Convention of Protection of the Black Sea Against Pollution and implementing measures for pollution reduction and for environmental protection. This shows the need to assist these countries and makes evident the responsibilities of the international community to respond to the regional and global concerns of environmental protection.

19. In general terms, the six Black Sea riparian countries can be categorized and characterized as follows:

Romania and Bulgaria

20. Romania and Bulgaria are both Black Sea countries and they are also both located in the lower Danube River Basin. They are both in this sense, polluters and victims of pollution to the Black Sea. Both countries are still in a challenging period of political, social and economic transition. Romania and Bulgaria are in the process of EU Accession and have clear priorities in meeting the requirements for potential entry in 2007. The EU Council endorsed detailed roadmaps and adopted revised Accession Partnerships for Bulgaria and Romania.

Georgia, Russian Federation and Ukraine

21. Ukraine is a Black Sea country that contributes to Black Sea pollution as well as suffers from the degradation of Black Sea ecosystems. Ukraine has the longest coastal line of the Black Sea and is also located in the lower Danube River Basin. Georgia and Russian Federation they are both located in the Black Sea basin, and they are both polluters and victims of pollution to the Black Sea. All three countries face important economic problems and are in phases of political and social transition. Whereas environmental concerns are of high importance, the financial means for investments are very limited. Particularly critical is also the fact that their legal and administrative framework is still to a certain extent determined by the former central planning structures and therefore is not yet in compliance with the requirements of the process of economic liberalization and privatisation.

Turkey

22. Turkey is a country of the Black Sea basin that has the second longest coastal line along the Black Sea. Turkey contributes to Black Sea pollution as well as suffers from the degradation of Black Sea ecosystems. As regards the economic criteria, Turkey has significantly improved the functioning of its market economy, while macroeconomic imbalances remain. Also, Turkey's financial means for investments into environment protection and rehabilitation activities are limited. Turkey is EU Candidate Country that has to achieve a compliance with three sets of accession criteria – the political, economic and acquis criteria - established by the 1993 Copenhagen European Council.

1.3 The Bucharest Convention

23. The Convention and its three Protocols[4] were adopted by the Diplomatic Conference on the Protection of the Black Sea against Pollution held in Bucharest on 21 April 1992, and deposited with the Government of Romania. The Convention, as well as the Land-Based Sources Protocol and the Emergency Response Protocol, entered into force on 15 January 1994, in accordance with Art. XXVIII of the Convention, i.e. sixty days after their fourth ratification.

1.3.1 Structure and contents

24. The name "Bucharest Convention" actually refers not only to the framework convention itself, the Convention for the Protection of the Black Sea, but also to its five Resolutions, and

[4] Protocol on Protection of the Black Sea Marine Environment Against Pollution From Land-Based Sources, Protocol on Cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations and Protocol on the Protection of the Black Sea Marine Environment Against Pollution by Dumping.

three Protocols: the Land-Based Sources Protocol, the Emergency Response Protocol, and the Dumping Protocol. The Land-Based Source Protocol and Dumping Protocol are accompanied by annexes containing so-called black and grey lists. In accordance with general practice, pollution by the substances and matter on the black lists (annex I), categorised as hazardous, needs to be prevented and eliminated by the Contracting Parties. Pollution by substances on the grey lists (annex II), categorised as noxious, need to be reduced and where possible eliminated. In the case of land-based sources, there is an additional Annex III, which prescribes restrictions to which discharges of substances and matters listed in annex II should be subject to. Furthermore, dumping of wastes and materials containing the noxious substances contained in annex II requires a prior special permit from "the competent national authorities", while, according to annex III, dumping of all other wastes and materials requires a prior general permit.

25. The Convention addresses five of the six generally recognised sources of marine pollution land-based (in Art. VII and Protocol), vessel-source (Art. VIII), ocean dumping (Art. X and Protocol), exploitation of the seabed of the continental shelf or margin (Art. XI), from or through the atmosphere (Art. XII). The only source not covered is exploitation of the seabed of the international area, simply because the Black Sea does not contain territory which falls under this definition. It also deals extensively with emergency response (Art. IX and Protocol), a term which refers to the use of techniques to prevent pollution arising from accidents, since the Black Sea.

1.3.2 Implementation

26. The provisions of the Bucharest Convention require implementation by the six Contracting Parties: the Black Sea coastal states. They are, bound to implement the provisions since the Convention is part of the legislation of all six countries. In practice however, some countries were not immediately capable to implement it, mostly because of economic constraints. The Convention does not provide for special enforcement techniques, such as a dispute settlement mechanism (the traditional enforcement technique, which is however not necessarily useful in case of environmental matters, where prevention rather than resolving or restoration is required) or a compliance reporting procedure, but, "in order to achieve the purposes of the Convention", it does provide for the establishment of a Commission for the Protection of the Black Sea, which shall consist of at least one representative of each Contracting Party. (Art. XVII). The Commission shall, inter alia, promote the implementation of the Convention, inform the Contracting Parties of its work, and assist them by making recommendations on measures necessary for achieving the aims of the convention, and on recommendations of possible amendments to the convention and protocols (Art. XVIII). The Convention further determines that the "Commission shall be assisted in its activities by a permanent Secretariat" (Art. XVII).

27. As a result of economic difficulties and the need to resume host country agreements, there was a considerable delay before the Secretariat became operational. This finally occurred in September 2000 and it is now fully functional, albeit with reduced number of staff.

The BSEP and the BSC

28. The Black Sea Environmental Programme (BSEP, see section (f, iii)) was launched in June 1993. The Programme included a number of interventions by the GEF (and other donors), the first of which was entitled 'Project for the Environmental Management of the Black Sea, approved under the GEF Pilot Phase). Its first task was to help create a strong international network of institutions, specialists and other stakeholders. The BSEP established its headquarters in Istanbul with the support of the Government of Turkey. The Programme was governed by a Steering Committee that included senior government officials from all Black Sea countries, the sponsoring organisations (the GEF and other donors), and representatives of the Black Sea NGO forum (as observers). In order to spread the technical responsibilities of the programme throughout the region and to make best use of the excellent specialists in the region, a system of Regional Activity Centres and Working Parties was devised. Each country agreed to sponsor one of its existing institutions as a regional centre for a particular field of expertise. The regional centres in turn organised Working Parties, specialist networks involving institutions from all six Black Sea countries. Using this structure, it was possible to bring together specialists who had sometimes not been able to co-operate previously. All of the institutions were provided with equipment (computers, analytical instruments, etc.) and specialist training and a new and productive dialogue began.

29. The BSEP Working Parties completed a series of background studies that enabled a Transboundary Diagnostic Analysis to be finalised in June 1996. On the basis of this comprehensive report senior government officials negotiated the Black Sea Strategic Action Plan (BS-SAP), signed on October 31st at a Ministerial Conference in Istanbul. The consensus on the BS-SAP was very broad. It provides a very modern approach to environmental policy making and agrees on the following key matters:

- That the principle cause for the decline of the Black Sea ecosystem is eutrophication;
- That without full co-operation with riparian countries of the main tributary rivers (Danube and Dnipro) this problem cannot be addressed;
- That the institutional structure of the BSEP should be incorporated into that of the Istanbul Commission for the Bucharest Convention;
- That an adaptive management approach should be adopted for the control of pollution in the Black Sea;
- That biological diversity and fisheries concerns should be part of the future agenda of the Commission;
- That greater stakeholder participation and transparency should be ensured (in line with the provisions of the Aarhus Convention.

30. Following the signature of the BS-SAP, GEF funding was sustained, albeit at a lower level, in order to enable countries to complete National Black Sea Strategic Action Programmes and for the negotiations on the institutionalisation of the Istanbul Commission's Secretariat to be completed. This was a very protracted three-year process as countries struggled to overcome technical and legal issues of establishing the Secretariat. In the meantime however, progress was made in implementing part of the BS-SAP thanks to GEF seed money and considerable support from the European Commission by Tacis or and DG XI (currently DG Environment). The main achievements were:

- Establishment of the ad-hoc technical working group with the ICPDR and joint analysis of the problem of eutrophication in the Black Sea, including recommendations for target for nutrient control;
- Continued support to the BSEP Activity Centres and real progress through demonstration projects in the areas of data quality control, oil spill response, coastal zone management, aquaculture and biological diversity;
- Strengthening of the programme for public participation, particularly through the Tacis small grants initiative, largely focussed on actions around Black Sea (as a reminder of commitments to the BS-SAP);
- Publication of the State of Pollution in the Black Sea report and the Black Sea Red Data Book;
- Agreement on a new set of water quality objectives to propose to the BSC as required by the BS-SAP.

31. In April 2000, a breakthrough was finally made in the negotiations for establishing the Commission's Secretariat. The Secretariat became operational in October 2000, following the selection of its senior officials at an extraordinary session of the BSC on September 10-11, 2000. Four countries (Bulgaria, Romania, Turkey and Ukraine) made their financial contributions to the Commission. In addition, the Republic of Turkey is providing the facilities for the Secretariat, to be shared with the PIU.

1.4 The Odessa Declaration and the BSSAP

1.4.1 The Odessa Ministerial Declaration

32. The Bucharest Convention itself is a legal and diplomatic tool for joint action and does not set out to establish environmental policy goals (e.g. targets for reducing the loads of specific pollutants etc.). It also does not establish any regulatory mechanism for exploitation or development of the natural environment (e.g. straddled marine resources or specially protected areas). In order to develop a common policy framework, a clear "Declaration of Environmental Quality Objectives" was considered necessary. Following the initiative of the Government of Ukraine and employing the stewardship of UNEP, a Ministerial Declaration was formulated during nine months of negotiations and signed by all six countries in Odessa in April 1993 (the "Odessa Declaration"). This Declaration was a pragmatic and innovative policy statement that sets environmental goals and a time frame to guide management regimes and associated investments. It was the first policy agreement on regional seas to reflect the philosophy of UNCED, Agenda 21, and features a heavy emphasis on accountability, periodic review and public awareness. These features represented a major conceptual shift in a public statement from countries of the region, particularly those emerging from totalitarianism.

33. The Odessa Declaration consists of a preamble, a general policy statement and nineteen specific actions. These actions were designed to facilitate the rapid development of practical measures for controlling pollution from land-based and marine sources (including the harmonisation of environmental standards); to restore, conserve and manage natural resources; to respond to environmental emergencies; to improve the assessment of contaminants and their

sources; to introduce integrated coastal zone management policies and compulsory environmental impact assessments; and to create a transparent and balanced mechanism for reviewing and updating the Declaration on a triennial basis. The Declaration was designed to provide a basis for a flexible but continuous process for taking decisions on coordinated national action towards common goals at present and in the future. Its clear objectives and specific time-frames were to guide and stimulate implementation of the Bucharest Convention. On the 7th of April 1996 the first triennium came to its end. A report commissioned by UNEP evaluated to what extent the Odessa Declaration has succeeded to serve as 'agenda' for implementation of regional measures, in accordance with the Bucharest Convention. The results of this analysis were encouraging even despite the lack of formal implementation of the Bucharest Convention. The Odessa Declaration had given a strong signal to donors, particularly the newly created Global Environment Facility, that the Black Sea countries were willing and able to cooperate on restoring and protecting this severely damaged and unique shared environment. This paved the way for financial assistance to be granted for implementation of the Odessa Declaration.

34. The Odessa Declaration was seen from the outset as an interim policy arrangement. It signatories called upon the GEF partners to assist them with the development of a medium/long-term action plan for the protection of the Black Sea. It thus set the wheels in motion for a much more comprehensive strategy of which the Declaration itself was to be one of the building blocks.

1.4.2 The Black Sea Strategic Action Plan (BSSAP)

35. The Development of the Black Sea Action Plan followed a carefully implemented technical process spanning over two years. The first step was the integration of an effective institutional network, a matter described in the previous section. The network was then asked to conduct an analysis of Black Sea problems within the field of specialisation of each "Working Party" (Biodiversity, Emergency Response, Fisheries, Pollution levels and effects, Pollution Sources, Legislation, Integrated Coastal Zone Management, etc.) The thematic analysis were conducted at a national level and then integrated regionally. In the case of sources and levels of pollution, new reliable information had to be gathered, a remarkable accomplishment in such a short time and one which required the cooperation of many national and international actors. A similar situation occurred in the case of fisheries. The thematic analyses were then gathered together and studied intensively by a group of regional and international specialists in order to construct a "Transboundary Diagnostic Analysis" (TDA) of the Black Sea.

36. The Black Sea TDA is a technical document which, in a highly analytical manner, examines the root causes of Black Sea degradation and options for actions which may be taken to address them. It examines each major environmental problem, the "stakeholders" involved in the problem (who is responsible? who has to act?) and the uncertainties in the information describing the problem (do we need more information and if so what kind?). It then proposes solutions, often giving various options and attempts to set a time frame and cost for the solutions. Some of the solutions require policy changes, some require capital investments. They are all part of a holistic management approach that does not limit itself to end-of-pipe

solutions but encourages the development of more environmentally sustainable economic activities.

37. The BS-SAP[5] was developed from June to October 1996 as a direct consequence of the TDA. It is a negotiated document, prepared during a series of meetings between senior environmental officials of all six Black Sea coastal countries and adopted (following in-country cabinet consultations) at a Ministerial Conference, celebrated in Istanbul on 31 October, 1996. The Plan, only 29 pages in length, contains 59 specific commitments on policy regarding measures to reduce pollution, improve living resources management, encourage human development in a manner which does not prejudice the environment, and to take steps towards improving financing for environmental projects. In adopting this plan, the Black Sea governments have committed themselves to a process of profound reform in the manner in which environmental issues are addressed in the Black Sea and its basin.

38. Notable features of the BS-SAP include its emphasis on integration of pollution control efforts with those of the Danube River, the adoption of a system of economic instruments to regulate existing sources of pollution (and to avoid new ones), enhanced protection status for sensitive coastal and marine habitats, inter-sectoral planning and management of coastal regions and greatly improved transparency and public participation. Implementation of the BS-SAP is currently somewhat behind schedule. This does not imply that there is no implementation at all but recent reports clearly indicate that the governments are not meeting the deadlines they set for themselves. There are many reasons for this, including the delays in completing the institutional arrangements described earlier and the continuing economic difficulties confronted by many of the countries. In its April 2000 meeting, the Black Sea Commission reiterated its commitment to oversee implementation of the BS-SAP. They also agreed to approach the GEF and the European Commission for renewed support to help them achieve this objective.

1.4.3 Programmatic framework: The Black Sea Environmental Programme (BSEP)

39. The support provided to the governments for implementing the Odessa Declaration and for developing and implementing the Black Sea Strategic Action Plan, took the form of a series of GEF, Tacis and Phare projects, and smaller donor initiatives, coordinated within a loosely defined programmatic framework described as the Black Sea Environmental Programme (BSEP). The BSEP 'label' served an important function of making the various interventions coherent and comprehensible to the public and to the governments. It is also attracted donor interest to the increasingly popular cause of 'Saving the Black Sea', to which the BSEP label became closely associated. The GEF project PCU became de-facto, the Secretariat for BSEP (though this arrangement was never formalised). This enabled staff from other projects (e.g. the Tacis Black Sea Project) to be seconded to the PCU and for the Directorate General for Environment of the EC to grant emergency funding to the unit during a period (1999-2000) of absence of GEF support.

[5] BSEP (1996) Strategic Action Plan for the Rehabilitation and Protection of the Black Sea, Istanbul, Turkey, 31 October 1996, 29pp.

40. Following the signature of the BS-SAP, the BSEP label continued to be applied to all interventions supporting the implementation of the Plan. The scope and form of the BSEP was defined by the BS-SAP though it ownership has passed to the Commission for the Bucharest Convention for the Protection of the Black Sea against Pollution (a rather more difficult title for the general public to grasp). Recently, the Black Sea Commission has agreed to formalise the BSEP as 'a coordinated programme of interventions designed to support the implementation of the 1996 Black Sea Strategic Action Plan for the Protection and Rehabilitation of the Black Sea' under its own aegis. Coordination of the projects within the BSEP will be ensured through the Joint Project Management Group in which all interventions in the Black Sea region at a programme or project level are represented.

1.4.4 National legal and policy tools

41. National legal systems for environmental protection are characterised by their diversity and rate of change. The legal systems of the former COMECON countries, heavily dependent upon strict water quality standards, are gradually being replaced by a more flexible and integrated 'system-based' approach. This is particularly true of the countries seeking accession to the EU (Bulgaria, Romania and Turkey) where the new EC Framework Water Directive has become the guiding principle for protecting water bodies and adjacent areas. A similar approach is being pursued in Ukraine. Most countries have a queue of new legislation awaiting parliamentary approval and environmental management depends on a mixture of laws and institutional structures from the past together with the new laws. The BS-SAP takes a pragmatic approach and recognises the need to harmonise the objectives of laws and regulations, rather than the laws themselves.

42. The BS-SAP also envisaged the development of National Black Sea Strategic Action Programmes that should provide a clear policy statement, at the national level, on how the provisions of the regional SAP are to be implemented. These National Plans were developed with the help of funding from the regional GEF intervention, implemented in the period 1997-1999. GEF-PDF-B support also enabled completion of reviews of the current legal, policy and institutional provisions for limiting nutrient discharges to the aquatic environment at the national level in the year 2000.

1.4.5 National resources and commitment

43. Each of the Black Sea Countries has a legal and institutional framework sufficient to enable its full participation in the project and has expressed its written commitment to make its own infrastructure and resources available for project implementation. As a result of previous interventions by the GEF and its partners within the framework of the BSEP, as well as country-based capacity building programmes, all six countries have received substantial support with equipment and training. The present project therefore focuses on consolidating and integrating these building blocks for the purposes of addressing the specific project objectives.

44. The level of commitment of the participating countries can be judged by the following criteria:

- All six countries have been consistent in their participation in the BSEP process in general and the UNDP/GEF projects in particular, since its establishment in 1991.
- All six countries have contributed expertise and information in the development of previous interventions, the BS-SAP and the preparation of the present project.
- All six countries are providing in-kind resources for the development of the project (the project 'baseline', valued at US$ 9,916,920).
- The countries have agreed to support the Secretariat of the Commission for the Bucharest Convention with a total cash contribution estimated at US$ 800,000 for the 2 –year period (yet two of the countries, Russia and Georgia, have to fulfil their commitment).
- Senior government officials are currently discussing a Ministerial meeting to reiterate their commitment to this process.

1.5 Cooperation between the Black Sea Commission (BSC) and the ICPDR

45. In 1998, the BSC and the ICPDR jointly established a Working Group, which analysed the causes and the effects of eutrophication in the Black Sea.

1.5.1 Findings of the Joint Ad-hoc Technical Working Group of the BSC and the ICPDR

46. In its findings, the Working Group indicated that the loads entering the Black Sea from the Danube had fallen in recent years due to the collapse of the economy of many transition countries s formerly attached to the Soviet Block, the measures undertaken to reduce nutrient discharges in the upper Danube countries, in particular Germany and Austria, and a decline in the use of phosphate in detergent.

47. The Working Group concluded that in spite of the evidence of recovery in the Black Sea ecosystems, there were still concerns that the nutrient discharges to the Black Sea – in line with the expected economic growth – were likely to rise again unless action was taken to implement nutrient discharge control measures as part of economic development strategies. The Working Group went on to define the possible objectives and strategies, which are presently included in the Memorandum of Understanding between the BSC and the ICPDR, as follows:

- the long-term goal is defined as a recovery of the Black Sea ecosystems to conditions similar to those in 1960;
- as a mid-term goal, measures should be taken to prevent discharges of nutrients and hazardous substances from exceeding the levels of 1997;
- inputs of nutrients and hazardous substances should be assessed, monitoring and sampling procedures should be determined, and the results should be reported.

48. Based on these results in order to facilitate and support the implementation of the Memorandum of Understanding within the Phase I of DRP the Joint Danube/Black Sea Technical Working Group has been revitalized. Both Commissions approved a new TOR and Work Program for the Group, focused on the development of ecological status indicators for the Black Sea, on the development of a regional monitoring program for the Black Sea and on updating of the assessment on point and non-point sources of pollution and the ecological status of the Black Sea, including eutrophication (cause-effect analysis).

1.5.2 Cooperation between the BSERP/BSC and the DRP/ICPDR for Phase II

49. The BSERP and DRP are two regional projects overlapping both territorially and technically. Three of the six Black Sea countries[6] are simultaneously involved in the activities of both projects. This is why; a close cooperation between the two projects is the only way to implement the tasks of the programme in a coherent and cost-effective way. In order to ensure such cooperation, a series of joint coordination meetings were held in both Istanbul and Vienna between representatives of both projects (the BSERP and DRP) and both international Commissions (the BSC and ICPRD).

50. Work programmes of the two GEF projects are lined up correspondingly between themselves, and those of the Commissions.

[6] Bulgaria, Romania, and Ukraine.

Table 5 Coordination Between the BSERP and DRP

Objectives/Outputs of the Phase II Programmes	Coordination with the Danube Regional Project and ICPDR
Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention	There is an intention to use the same international consultants as in the DRP, which will provide for a coordinated facilitating of the process of the establishment of national inter-ministerial bodies, extension of the experience gained in Bulgaria, Romania and Ukraine to Georgia, Russia, Turkey
Objective 2: Development of policy guidelines, legal and institutional instruments for nutrient reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones	1) Link to the ICPDR/DRP on implementation of WFD in coastal areas (in particular in Romania); 2) Build on results achieved by the DRP in the policy development and concepts for BAP in BG, RO, and UA. Extend the corresponding activities to Georgia, Russia, Turkey; 3) Cooperate with the DRP on BAT related activities for BG, RO, and UA. Build on Industrial policies developed for the Danube, adapt to the actual situation in the Black Sea countries; 4) Incorporate policies and technologies developed by the DRP for municipal sector for BG, RO, and UA (the Danube Pollution Reduction Programme); 5) Link to ICPDR database developed for DABLAS.
Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems	Extend the corresponding activities of the DRP to RU, TR, GE; include teams of international Consultants, who were used in the DRP; Provide national consultants from the Black Sea countries
Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention	1) Data and methodology from ICPDR cruises in Danube delta; 2) Emission data from DANUBS will be used; 3) Incorporation with the DRP for BG, RO and UA, BSERP - in 3 other countries
Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raising and implementation of community actions (Small Grants Programme)	Coordinate with the DRP on modalities of execution, selection of project and evaluation of projects within SGP.

2 STRATEGY FOR USE OF UNDP/GEF RESOURCES

2.1 Relationship to UNDP's mandate

51. The principal reason for UNDP involvement in this project is that this project falls under two of the key UNDP mandates i.e. governance and environmental protection. The project, involving Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine brings the countries closer together in achieving common goals. The current project was developed as part of the International Waters Portfolio of the UNDP-GEF. UNDP has been the lead agency in this process from the outset.

52. UNDP has country offices in all six beneficiary countries. The UNDP Resident Coordinator in Turkey will act as the Principal Project Resident Representative for the duration of the project.

2.2 Identification of alternative strategies

53. Governments are fully aware of the problems afflicting the Black Sea but do not feel fully empowered to resolve them. Since the early 1990s, economies have collapsed in all countries except Turkey and much of the infrastructure has deteriorated due to the need to spend limited revenues on other immediate priorities. Even routine monitoring of the Black Sea ceased from the late 1980s in all countries except Romania. However, the previous GEF interventions helped to keep protection of the Black Sea firmly on the international and national agenda and led to a number of positive actions. These included the establishment of a new policy and institutional framework, a very large capacity-building effort and pilot studies and investments (very significant ones in the case of Romania and to a lesser degree Bulgaria and Georgia). Work to support public involvement and the diffusion of information also continued. These interventions helped to raise the baseline from the 1993 inception level to the present one. They have also led to "buy in" by the governments to the Bucharest Convention Secretariat and other measures to afford better protection to the Sea itself.

54. Despite the previous projects however, the central issue of eutrophication control remains. The "business as usual" development scenario would, inter alia, include projects to invest in more cost-effective agriculture and to develop waste treatment to a level that would satisfy the immediate imperative of improving public health, encourage economic recovery and protect adjacent natural areas. Such projects would be unlikely to mitigate eutrophication; indeed that would probably exacerbate it.

55. At the same time, it should be noted that economic decline has brought temporary relief to the Black Sea since the discharge of nutrients and certain hazardous substances has also decreased. There is an unprecedented opportunity to adopt a new development approach working from the current very low baseline. This window of opportunity will most likely be a very small one.

GEF Alternative

56. The GEF alternative consists of practical steps towards:
   a) better understanding of the situation at all levels;
   b) common environmental objectives;
   c) a reappraisal of values, both economic and ethical;
   d) the availability of cost-effective practical alternatives to current practices;
   e) their institutionalization in education, policy and law,
   f) effective structures for implementation; and
   g) statutory procedures for monitoring compliance, trends and emerging issues.

57. This will be accomplished through GEF support to key measures that would be unachievable without the active co-operation of the six countries in the region, the seventeen countries in the wider basin and of the wider international community. The GEF alternative will achieve its global and regional objectives in the through the following immediate objectives:

1. Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention
2. Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones
3. Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems
4. Development of operational systems for monitoring, information management and research under the Black Sea Convention
5. Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

58. The Black Sea project is highly replicable. Eutrophication is a problem common to many enclosed and semi-enclosed seas and is one that is likely to increase in the future if measures are not taken to adopt practices that result in decreased nutrient discharges to rivers, the coastal zone and the atmosphere.

2.3 Relationship to the GEF International Waters Focal Area

59. The project is an integral part of the GEF Danube/Black Sea Basin Programmatic Approach. This enables a process of goal setting and adaptive management for the entire 17 country 2 million square kilometres Black Sea Catchment area. The approach is fully consistent with the guidance for GEF Operational Programme Number 8, "Waterbody-based Operational Programme." The goal of this Operational Programme is to assist countries in making changes in the ways that human activities are conducted in different sectors so that the particular waterbody and its multi-country drainage basin can sustainably support the human activities. Projects in this OP focus mainly on seriously threatened waterbodies and the most imminent transboundary threats to their ecosystems as described in the Operational Strategy. Consequently, priority is placed on changing sectoral policies and activities responsible for the most serious root causes needed to solve the top priority transboundary environmental concerns.

3 IMMEDIATE PROJECT OBJECTIVES

60. The objectives, expected Outputs and activities of this project have been driven by the results of the TDA and the SAP that were developed by the countries as part of their work under the previous GEF projects. They are also driven by the recently published Pollution Assessment of the Black Sea (Black Sea Technical Series No. 10, UN Publications New York) the work of the ad hoc working group between the ICPDR and the BSC, and the results of the studies published during execution of the PDF-B. These studies clearly demonstrate the overriding significance of eutrophication as the transboundary issue having greatest long-term impact on the Black Sea. It is also the issue involving more stakeholders distributed over a wider geographical area than any of the other issues impacting the Black Sea. There are a number of other transboundary issues requiring attention however, some of which may be the subject of action by other donors:

- A major decline in Black Sea commercial fish stocks and non-optimal harvesting of living resources;
- Introduction of exotic species by ships and releases from aquaculture;
- High accident risk of tankers, especially in the Istanbul Straits;
- Deterioration in beach and near-shore habitat quality due to marine-based sources of oil and garbage as a result of tanker operations and disposal of garbage at sea;
- Physical destruction and alteration of coastal habitats and landscapes;
- Lack of full understanding of the distribution of toxic organic compounds.

3.1 Long and medium term objectives

61. The long-term and intermediate objectives of the project are those established by the Joint ad-hoc Working Group between the BSC and the ICPDR (1999), namely:

- The long-term objective is for all Black Sea basin countries to take measures to reduce nutrient levels and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s.
- As an intermediate objective, urgent control measures should be taken by all countries in the Black Sea basin, in order to avoid that discharges of nitrogen and phosphorus to the Black Sea exceed those levels observed in 1997. This will require countries to adopt and declare strategies that permit economic development whilst ensuring appropriate practices and measures to limit nutrient discharge, and to rehabilitate ecosystems which assimilate nitrogen and phosphorus. This target, monitored and reported annually, shall be reviewed in 2007 with a view to considering further measures which may be required for meeting the long-term objective.

62. This project has been developed and coordinated in parallel with the World Bank/GEF Partnership Investment Facility for Nutrient Reduction to help stimulate investments towards these goals.

3.2 Strategy for reaching the objectives

63. The main focus of the current proposal is the issue of eutrophication. This requires coordinated actions to achieve three sub-objectives:

- Reduction of the nitrogen and phosphorus loads to the Black Sea;
- Enhancement of the service function of wetlands and benthic (seabed) plant communities for the assimilation of nutrients;
- Improved management of critical habitats to permit economic recovery of fisheries in parallel with improvements to the ecosystem.

64. In addition to the above, and where appropriate, attention will also be given to transboundary contamination by hazardous substances, particularly where these have similar sources to nutrients. Phase 2 of the project will give attention to oil pollution (a significant problem in the Black Sea), by further developing and implementing measures that may reduce the risk of spillage by ships.

65. The actions identified in the current project are far-reaching and involve activities by the national and local governments, regional organisations, the GEF, other donors, the private sector, NGOs and the public in general. Eutrophication on the Black Sea results from the failure of a wide range of sectors to understand the relationship between their activities and the decline of remote marine and coastal ecosystems. Reversal of this situation requires: (a) better understanding of the situation at all levels; (b) common environmental objectives; (c) a reappraisal of values, both economic and ethical; (d) the availability of cost-effective practical alternatives to current practices; (e) their institutionalisation in education, policy and law, (f) effective structures for implementation; and (g) statutory procedures for monitoring compliance, trends and emerging issues. The current project seeks to address each of these requirements in order to control eutrophication in a sustainable manner.

66. Effective reduction of eutrophication in the Black Sea requires the full co-operation between all 17 countries within the Basin. The present project builds on the co-operation already established between the BSC and the ICPDR, extending this further to include the proposed Dnipro Commission. The cooperation builds on a process of joint goal setting based upon the adaptive management approach. It will enable the Basin countries to complete the first iteration in this process and to set new targets for the future, based upon objective technical information and pragmatic economic considerations.

3.3 Beneficiaries

67. The current project is expected to result in a wide spectrum of beneficiaries, especially when taking into account the long-term implications for sustainable development in the Black Sea region. In the shorter term, the beneficiaries are described as follows:

- The Commission for the Bucharest Convention (BSC) – through a greatly enhanced capacity to fulfil its mandate with respect to the implementation of the Bucharest Convention and the BS-SAP;
- National Governments – through support with the development and co-ordination of effective policies to tackle the problem of eutrophication (as well as other forms of transboundary pollution) and the rehabilitation of the Black Sea ecosystem;
- Local Governments – by improved participation in tackling environmental issues that are beyond their immediate jurisdiction and by sharing experiences with others on ways of doing this;
- Non-Governmental Organisations – through support with their work, focussed on local-level efforts designed to contribute significantly to the overall objectives of the project;
- Teachers, educational establishments, and major stakeholder groups, such as farmers and fishermen– by providing information, materials and networking to support their essential role in empowering society to resolve and prevent key environmental issues affecting the integrity of the Black Sea and the sustainable use of its resources:
- Public at large, through improved water quality and public health conditions and rehabilitation of recreational values.

68. Successful implementation of the project will result in global benefits. These result from the contribution that a healthy Black Sea ecosystem will make to reducing environmental stress on the global marine environment, the global importance of conserving habitats and biological diversity, and the replicability value of a project that addresses one of the major threats to regional seas world-wide.

4 PROJECT DESCRIPTION, OBJECTIVES, OUTPUTS, OUTCOMES, AND ACTIVITIES

4.1 Introduction

69. The long-term development objective of the proposed Black Sea Ecosystem Recovery Project is to contribute to sustainable human development in the Black Sea area through reinforcing the cooperation and the capacities of the Black Sea countries to take effective measures in reducing nutrients and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s. The overall objective of the project is to ensure (i) that all of the Black Sea countries take concrete measures (including investment activities) in the eutrophication causing sectors to reduce load of nutrients and hazardous substances on the Black Sea ecosystem and, (ii) that major findings and recommendations of the project have been incorporated in national policies, strategies and, where possible, in national legislation.

70. The overall objective of the BSERP is to support participating countries in the development of national policies and legislation and the definition of priority actions to avoid that discharge of nitrogen and phosphorus to the Black Sea exceed those levels as observed in 1997. This will require countries to adopt strategies and measures that permit economic development whilst ensuring the rehabilitation of coastal and marine ecosystems through pollution control and reduction of nutrients and hazardous substances. At the end of the Project Phase II, it is expected that the institutional mechanism of the Black Sea Commission is reinforced and fully operational ensuring cooperation between all Black Sea countries to efficiently implement joint policies and actions and operate common management and control mechanisms.

71. Specific objectives of the BSERP are (i) to reinforce regional cooperation under the Black Sea Convention, (ii) to set up institutional and legal instruments and to define priority actions at regional and national levels to assure sustainable coastal zone management, (iii) to protect of coastal and marine ecosystems and habitats in order to secure sustainable use of coastal and marine resources. To accomplish these objectives, the project will build up on the results of Phase I.

4.2 Specific Objectives, Outputs and Activities for Phase 2

72. The logical framework which shows the objectives, verifiable indicators and sources, assumptions and risks of the activities planned for Phase 2 is presented in **Error! Reference source not found.**. A description of the activities planned for Phase 2 is presented below.

4.2.1 Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention

73. The mechanism for institutionalizing the Black Sea Commission and its Secretariat with the GEF Implementing Agencies, as agreed during the meeting of the Istanbul Commission held on 25-26 April, 2000, was devised to sustain the work of the Black Sea Environmental Programme. This arrangement proved cumbersome and inefficient and, accordingly, has been revised for Phase 2 of the project (described in detail in Section 11). For the present project, the key management bodies will be the Project Steering Committee (SC) at an executive level and the Project Implementation Unit for project implementation itself. The Project Coordinator will have executive responsibility for the PIU itself. The PIU will act in a semi-autonomous manner. It will continue to share the facilities of the Secretariat. Staff of the PIU and the Secretariat will liaise closely on a day-to-day basis and be mutually supportive but with clearly defined individual responsibilities. The PIU will continue to provide technical support to the Secretariat of the Permanent Secretariat for establishing regional 'expert' groups, national Inter-Ministerial Bodies and for assisting with the administration of the Advisory Groups, Activity Centres and their respective Focal Points. These will operate in the manner described in the BS-SAP, in most cases supported by a blend of National and donor funding. The project has been designed to give maximum support to the Commission and its Permanent Secretariat but to clearly distinguish project (i.e. limited term) elements from those that should be sustained by the countries themselves.

74. The Work Programme of the BSERP has been revised to fully include the requirements of Black Sea Commission. The implementation of the EU Water Framework Directive is of top priority for the ICPDR and is also part of the commitments of the Black Sea Commission regarding transitional, coastal and marine waters. The primary purpose of the Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. The Danube river basin district will include the coastal waters of Romania along the full length of its coastline as well as the Ukrainian coastal waters extending along the hydrological boundaries of the Danube river basin. The Danube-Black Sea Joint Technical Working Group have specified monitoring tasks related to coastal waters and will to develop the methodological approach in regard to achieving the good status of the coastal waters in the Black Sea. On a practical level, cooperation with the GEF Danube Regional Project has been agreed during Phase 2 in order to assist the Black Sea countries to establish or strengthen national coordinating mechanisms to assure nutrient reduction and sustainable management of coastal and marine ecosystems. The PIU activities will also include support for cooperation with the GEF Dnepr Regional Project during this phase of the project.

75. The current PIU will continue to operate at the project level to ensure the management of its activities and the delivery of Outputs. In summary, GEF support will continue to focus on enhancing the work of Commission to address the key issues that are the subject of the present proposal and to help it achieve long-term sustainability.

Output 1.1: Operational structures and management tools of the Black Sea Commission further developed and functioning.

76. Continued support will be provided to the BS Project Steering Group to assure regional cooperation and efficient implementation of project activities. The PIU will further assist the

Black Sea countries to establish or strengthen national coordinating mechanisms to assure nutrient reduction and sustainable management of coastal and marine ecosystems. In this regard, cooperation with the GEF Danube Regional Project has been planned for related activities to be undertaken in Bulgaria, Romania and Ukraine. Logistic support will continue to be provided to the Black Sea Commission, its Permanent Secretariat and the Advisory Groups (co-ordinated by Regional Activity Centres) to facilitate implementation of the Black Sea Strategic Action Plan (BSSAP) and the project activities.

77. The BSERP will further support the work of the Danube-Black Sea Joint Technical Working Group, to assure efficient implementation of the MoU and of the related Joint Work Program. The latter programme includes the development and routine monitoring of environmental status indicators in the Black Sea to demonstrate changes over time in Black Sea ecosystems. Support for the cooperation of the BSC with other river basin commissions in the Black Sea Basin (e.g. GEF/UNDP Dnepr Regional Project) will also be provided.

78. The success of this objective is dependant on sufficient budgetary means of the BSC Secretariat and sufficient support from Contracting Parties for the work of the national and regional bodies of the BSC. Financial support is also required from the Contracting parties at the national level to support the work of the D-BS JTWG.

79. Criteria for success will be represented by: (i) the BS Project Steering Group continuing its operation and meeting on a regular basis to follow-up and evaluate the BSERP performance; (ii) National Coordinating Mechanisms reinforced or set by 2005 in all BS countries; (iii) Advisory Groups operational through logistic support from BSERP (continuous); (iv) the work programme of D-BS JTWG fully implemented in 2006 through joint support from BSERP and DRP; Contacts established with all BS river basin commissions.

80. Outcomes for Output 1.1: Operational structures and management tools of the Black Sea Commission further developed and functioning:

1. BSERP activities are closely linked to the real needs of the riparian countries in the implementation of the Bucharest Convention through timely interventions of the Project Steering Committee established in Tranche 1
2. Nutrient reduction strategies and sustainable management of the marine ecosystems in the counties are strengthened by effective national coordination (inter-ministerial) mechanisms. Inter-Ministerial Coordinating Mechanisms are functioning in at least 2 Black Sea in order to develop, implement and follow up national policies, legislation and projects for nutrient reduction and pollution control.
3. Revised TDA becomes the basis of development of regional and national strategies for reduction of nutrients and hazardous substance until 2010,
4, Regional and National SAPs provide for a coherent logistical implementation of the management of nutrients and hazardous substance in riparian countries and the Black Sea as a whole.
5. Ability of 6 riparian countries to jointly manage the resources of the Black Sea through measures to protect the marine ecosystem led by the BSC and coordinated by the Permanent Secretariat.
6. Joint policy-making framework established and functioning in the Black Sea region (including the Danube River Basin) for reduction of discharges of nutrients and hazardous substances into the Black Sea. The understanding of the impacts from the Danube and the Dnipro to the Black Sea ecosystem is improved and potential risks associated with nutrients and hazardous substances is considerably reduced by 2010.

Output 1.2: Black Sea Project Implementation Unit of the Istanbul Commission (BS-PIU) fully operational for implementing Phase II of the BSERP.

81. The PIU will act to assure efficient implementation of the UNDP-GEF Black Sea Recovery Project (BSERP) with the aim to reinforce and support the activities of the Black Sea Commission. The PIU will operate with three professional (CTA, Monitoring and Evaluation and Information Specialist and a regional officer for harmonisation of EU water policies) and 5 supporting staff (accountant, contract manager, public relations officer, secretary and driver).

82. The greatest risk to the successful completion of the BSERP objectives would be insufficient support from Governments for project implementation due to political or financial constraints and insufficient human capacities as well as inadequate adaptation of project objectives and activities to national conditions. The strategy adopted for Phase 2 also depends markedly on the access to information by the riparian Governments, the consequence of which will markedly affect the performance of sub-contractors and/or international consultants as well as the national consultants. According to the decision of the Project Steering Committee (Sept 2003) it was recommended to establish support offices, which would provide an efficacious mechanism to support the project activities in the countries. This arrangement will also provide the necessary support to the work of international consultants, as well as aiding the PIU with the role of supervising the national consultants who are responsible for facilitating the gathering of information at the national level.

83. The six Black Sea Commissioners have agreed to provide premises for the project offices as an in-kind contribution. Country coordinating experts have been nominated by the Black Sea Commissioners /National Coordinators and recently employed by the project until the end of the Phase 1 (April 04). The structure of the proposed institutional set up is described in detail in Section 11. It is the aim of the project to build on the achievements in Phase 1 and further establish and operate a project support structure at the national level in order to facilitate cooperation between the BSREP and the National Commissioners. Accordingly, corresponding funds have been allocated in the budget for Phase II (see Table 26, Budget Line 1701).

84. The PIU activities will reinforce cooperation with the DRP (and the UNDP/GEF Dnepr Project) to efficiently coordinate project activities to avoid duplication of interventions and assure effective use of funds. Further cooperation with be established with other projects of technical assistance operating in the Black Sea region to assure coordination and complementary of measures (e.g. W.B. Strategic Partnership Programme in Bulgaria, Georgia and Romania, EU EuropeAid projects, etc.).

85. The development of a set of monitoring and evaluation indicators are currently being devised by the PIU for the assessment of the overall impact of project in the Black Sea region. Success criteria for this Output will include: (i) legal and institutional instruments in all BS countries improved to reach EU or international standards and monitoring and coordinating mechanisms of BSC fully operational by end 2006; (ii) the further establishment of a project support structures in the countries, becoming fully operational starting mid-2004; (iii) activities between BSERP and DRP fully coordinated and jointly implemented where appropriate (continuous); (iv)

information exchange with other BS environmental projects and Agencies established and implementation of activities coordinated (continuous); (vi) the development of specific indicators (e.g. process indicators) to demonstrate efficient implementation of project activities to be applied in the GEF project evaluation as from mid 2005 onwards.

86. Outcomes for Output 1.2: Black Sea Project Implementation Unit of the Istanbul Commission (BS-PIU) fully operational for implementing Phase II of the BSERP:

1. The project is implemented according to the programme reaching at least 80% of envisaged tangible results.
2. BSC/PS is efficiently supported through a continuous assistance from the PIU in order to implement the BSC's approved workplan and budget for 2004 (and further).

4.2.2 Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones.

87. Work conducted during the PDF-B phase of the project by UNEP has shown that there is a significant gap between the existing Protocol for the Control of Land Based Sources of Pollution of the Bucharest Convention and the requirements for meeting the goals of limiting nutrient loads to the Black Sea to their 1997 levels.

Output 2.1: Protocol for Land-based Activities (LBA) revised and submitted for national negotiation.

88. This objective was initiated in Phase 1 of the project to assist the Commission and Contracting Parties to close this legislative gap. Phase 1 activities were planned to provide a policy paper and technical recommendations for regional consultation regarding the revision of the LBA protocol. The policy paper includes (i) a review of the implementation of the current Protocol and obstacles to be overcome; (ii) an examination of the gaps in the current protocol with respect to national legislation, GPA implementation and the EC Framework Water Policy (including implementation of all the relevant Directives, particularly for countries in accession); (iii) a description of the current advances toward the establishment of monitoring, compliance and enforcement arrangements under the protocol in its revised form; and (iv) a mechanisms for reporting and data exchange in the revised protocol. UNEP is currently heavily involved in the development of a new LBA Protocol. A number of local consultants/focal points have been employed to support the activity and to facilitate the adoption of the document being developed and adjusted to the real situation of the Black Sea countries. It is expected that the technical activity will be completed by 2004 end. The official adoption of the new Protocol by the Black Sea countries is expected to be concluded before the end of Tranche 2.

89. The policy paper and technical recommendations shall be presented to a technical meeting of the BSC (or more than one if needed) during first year of Phase 2. This will involve representatives and technical advisers selected by the Commissioners. At the end of the technical meetings a draft revised Protocol will be completed for submission to the Commission. It will enter a formal process of governmental review, approval and ratification to be determined

according to the rules and procedures of the Commission itself. It is assumed that cooperation of all Contracting will be assured for approval of the LBA Protocol by the BSC and in following national negotiation (taking into account that accession countries adopt national legislation in line with EU requirements.

90. Outcome for Output 2.1:

> Revised Protocol becomes a legally binding management document in 2005 used in the activities of the BSC and riparian countries in-line with the EU requirements.

Output 2.2: Strengthen Integrated Coastal Zone Management in line with EU Directives and promotion of Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.

91. The 3rd Meeting of the Advisory Group on Development of the Common Methodologies for the Integrated Coastal Zone Management recently reviewed the existing draft ICZM documents and discussed the further steps which are necessary for development of the Black Sea ICZM Strategy and Code of Coastal Conduct (included in the current BSC Work Program). ICZM policies and strategies for the Black Sea coastal states (1999), developed by the ICZM Activity Centre, Krasnodar, Russian Federation, are currently valid., although on the operation level a logistical plan of action has not yet been discussed by the ICZM Advisory Group. Revision of ICZM report and ICZM policies and strategies is considered to necessary. The decision on the Regional Code of Conduct shall be made after developing the above document for reaching a wider public in coastal management. The PIU will assist in finalizing concept and guidelines for coastal zone management (developed by Tacis Project) and in developing national strategies for ICZM, taking into account principal objectives of the EU WFD and other existing and emerging EU Directives for management of marine ecosystems. The project will also concentrate on the strengthening of the ICZM National Focal Points of the BSC to implement recommendations and guidelines prepared by pilot projects for coastal zone management and for rehabilitation of coastal wetlands and transitional waters and support efficient management of relevant information and indicator based data on coastal and marine ecosystems in all Black Sea countries.

92. The current EU TACIS project has provided technical assistance on ICZM components to Black Sea Commission by means of workshops and the conceptualisation and implementation of a pilot ICZM project. In Phase 2, the BSERP will aim to develop an ICZM pilot project which concentrates on testing the concept and guidelines for ICZM as developed by BSC/Tacis. The BSERP, in association with the WB project in Bulgaria, will conceptualise, design and assist in implementing a pilot project for restoration and management of wetlands with the aim to enhance nutrient absorption capacities. The project will also undertake to assist in implementation of a pilot project for the establishment of marine protected areas (e.g. Vama - Veche, in Bulgarian-Romanian trans-boundary zone).

93. It will be essential for the success of the project that all Black Sea countries cooperate in adopting and introducing concept of ICZM and provide sufficient engagement (financial and human capacity constraints) from national and local Government to support activities of ICZM Centres. It is also necessary that sufficient support is provided from Government and local administration for implementation of Pilot Projects on ICZM, wetlands restoration and protection

of marine ecosystems. Sufficient interest and support from private stakeholders and NGOs to cooperate in the implementation of Pilot Projects will also be required.

94. Success Criteria will include: (i) concepts and guidelines for coastal zone management reviewed by the end 2004 and concepts for national strategies developed; (ii) an outline and work program for Pilot Project for testing of ICZM concept developed by end-2004 and project successfully implemented by end-2006; final evaluation report available by March 2007; Preparation of a pilot project for marine protected area is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for the marine protection; (iii) preparation of a pilot project for restoration and management of wetlands is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for wetland management; and (iv) ICZM National Focal Points strengthened and supported throughout the Phase II in all Black Sea countries.

95. Outcomes for Output 2.2: Strengthen Integrated Coastal Zone Management

1. The concepts and guidelines for ICZM are incorporated in the national strategies and local planning by 2006 in the riparian countries.
2. A Pilot Project Is Developed For Testing Concept And Guidelines For ICZM As Developed By BSC/TACIS by mid-2005 and implemented within the life-time of the project.
3. The capacity of the BSC to coordinate the ICZM planning process is strengthened through tools and mechanisms developed.
4. National FPs are trained to provide relevant information and indicator-based data on the coastal and marine ecosystems in all Black Sea counties, which will contribute to the effective production of a regular reporting on the state of the environment.

Output 2.3: Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.

96. In order to determine the impact of agriculture on the coastal waters of the Black Sea, a Coastal Zone Agricultural Emission Inventory (CAEI) on agricultural point and non point sources of pollution will be carried out according to the methodology prepared under the DPR. This methodology has been developed to take into account the emissions of nutrients and hazardous substances in the coastal zones of Bulgaria and Romania, the latter falling under the remit of the ICPDR. The BSERP will extend the methodology to all of the Black Sea countries in order to make an inventory of agriculturally generated pollution in all coastal regions. The BSERP will also undertake an inventory on important agrochemicals in terms of national production, import and their use (mode of application, misuse, and environmental impact) and potential for reduction.

97. The DRP has recently reviewed relevant agricultural policies, legal instruments and their actual state of enforcement, and are in the process of identifying existing programs for promotion of Best Agricultural Practices (BAP) in Bulgaria, Romania and Ukraine. The BSERP will act in Phase 2 to extend the review to the remaining Black Sea countries. The objective of this activity is to prepare or, where existing, further develop mechanisms for introduction of Best

Agricultural Practices in all Black sea countries, taking into account country specific institutional, administrative and economic issues (e.g. incentives). The activity will centre around the organisation of a series of workshops on modalities for introduction of Best Agricultural Practices in Black Sea countries with particular attention to agriculture in coastal zones (Cooperation with GEF DRP in organizing workshops in Bulgaria, Romania and Ukraine). Participants from relevant ministries, agricultural associations, financing institutions and international agencies (EC, UNDP, WB, bilateral donors, etc) will be invited to attend.

98. In order to achieve a successful Output, the Cooperation of Governments in providing necessary information and data and the preparedness of Government and local administration to revise agricultural policies and to introduce BAP though national extension services (limited financial means and human capacities) must be assured. Taking into account special know-how, financial and marketing considerations, regional farmers might not adopt BAP without subsidies

99. Success criteria for this activity include: (i) an agricultural emission inventory for BS coastal countries prepared for BG and RO by end 2004 (in cooperation with the DRP), for UA, RU, GE and TR by mid 2005; (ii) a report on agricultural policy review and programs for BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP; (iii) an inventory on important agrochemicals for RU, GE and TR available by end 2005, based on common methodology developed by DRP; (iv) concepts for introduction of BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP; adoption in national policy and practical application at least in coastal zones expected by end 2006; and (v) concepts for nutrient reduction and application of BAP known and accepted by Government and stakeholders (farmers associations, NGOs) in the countries through information and training workshops in 2005.

100. Outcomes for Output 2.3: Agricultural sector policy:

1. The integration of water quality objectives related to agriculture nutrient pollution (i,e, N and P) into agriculture policies increased in 6 Black Sea countries.
2. New agricultural policies for controlling non-point sources of pollution from agriculture accepted by policy makers based on broadly disseminated nation-specific BAP concepts.
3. Agricultural emission/load inventory will contribute to the updating/identifying of key areas for both pollution and biodiversity/sensitive areas as a part of TDA and SAP
3. BAP accepted by farmers in the field in the Black Sea riparian countries.
4. 50 farmers in the Black Sea coastal region aware of and applying best agricultural practices.

Output 2.4: Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances

101. In order to determine the impact of the industrial and transport sector on the coastal waters of the Black Sea, a Coastal Zone Industrial Emission Inventory (CIEI) will be established on industrial and transport (e.g. harbours) activities, taking into account emissions of nutrients and toxic substances in the coastal zones of the Black Sea. This methodology has been developed by the DBR to take into account the emissions of nutrients and hazardous substances in Bulgaria, Romania and Ukraine. The BSERP will extend the methodology to all of the Black Sea countries

The BSERP will also undertake to develop criteria for the selection of "hot spots" and subsequently revise those previously identified in the industrial and transport sectors which have been regarded as having a significant impact on coastal waters (recreation resorts, fish spawning areas, etc.). This activity will provide a clear definition of Significant Impact Areas (SIA) of pollution from industrial and transport activities and provide an analysis of their cause-effect relationship.

102. For Bulgaria, Romania and Ukraine, the DRP has recently reviewed relevant policies, legal instruments and their actual state of enforcement, and are in the process of developing appropriate mechanisms for step-by-step introduction of BAT, taking into account regulatory and legal issues, awareness raising, fines, economic incentives, etc. The BSERP will act in Phase 2 to extend the review and the modality for the implementation of BAT to the remaining Black Sea countries. The BSERP will also develop the concept for networking amongst technical and economic experts and decision makers to exchange information and to promote innovative and environment friendly technologies for reduction of nutrients and hazardous substances (see also Output 4.2). This will be organised, in part, by holding national workshops with participants from relevant ministries, industrial and transport managers, banking institutions, to discuss modalities for introducing BAT, and for obtaining financial support for innovative technologies.

103. A review of industrial and transport emissions in the coastal region is wholly dependant on the cooperation of Governments and industrial private sector in providing necessary information and data.

104. It is assumed in carrying out activities in these sectors that Government and local administration are prepared to revise industrial emission standards and to introduce BAT though national advisory services for cleaner industrial technologies. To successfully complete this activity, the BSERP will rely on the preparedness of the public and private industrial sector to adopt BAT (in relation to technological know-how and financial considerations).

105. Success criteria will include: (i) an industrial emission inventory prepared for coastal zone of all BS countries by the end 2004; (ii) industrial and transport emission related "hot spots" for all BS countries in coastal zone identified and impact evaluated by mid 2005; (iii) an analytical report on industrial production involving N and P and hazardous substances in coastal areas of the BS finalised by end 2005; (iv) an analytical report on policies and legal and institutional instruments to control industrial pollution with focus on dangerous substances for RU, GE and TR available by end 2005 (BG, RO, and UA under DRP); (v) concepts for introduction of BAT for industrial and transport sector for RU, GE and TR available by mid 2005; (vi) adoption of BAT in national policy and practical application at least in two coastal zones expected by end 2006, and (vii) concepts for reduction of nutrients and dangerous substances and for application of BAT are known and accepted by Government officials and stakeholders (industrial and transport firms, NGOs) in RU, GE and TR through information and training workshops organised in 2005.

106. Outcomes for Output 2.4: Policies and legislation for application of BAT in the industrial and transport:

1. The integration of water quality objectives related to industrial pollution (priority substances according to the Bucharest Convention list) into industrial policy and regulatory framework according to EU Directive on Integrated Pollution and Prevention Control enhanced in 6 Black Sea countries.
2. Priorities for pollution reduction in National Action Programmes revised , based on improved methodology for emissions inventories (reflecting the EU directives requirements on reporting) and on better understanding of cause and effect relationships.
3. Emission inventory and criteria for "hot-spot" will contribute to the updating/identifying of key areas for both pollution and biodiversity/sensitive areas as a part of TDA and SAP

Output 2.5: Policies and legal instruments for pollution reduction for the municipal sector assessed and affordable (cost recovery) technical solutions for municipal wastewater treatment provided for national/local implementation.

107. In Phase 2, the BSERP will establish basin-wide Coastal Zone Municipal Emission Inventory (CMEI) for agglomerations in excess of 15,000 population equivalents (p.e), indicating emissions of BOD/COD, nutrients and toxic substances and compiling information on existing or planned sewer or collector systems and existing or planned WWTP in the coastal zones of the Black Sea. The BSERP will also undertake to develop criteria for the selection of "hot spots" (see also Output 2.4) and subsequently revise those previously identified in the municipal sector which have been regarded as having a significant impact on coastal waters. This activity will provide a clear definition of Significant Impact Areas (SIA) of pollution from municipal activities and provide an analysis of their cause-effect relationship.

108. For Bulgaria, Romania and Ukraine, the DRP has recently reviewed relevant existing legal and institutional mechanisms for pollution control from urban sources and is in the process of proposing measures for harmonizing national legislation with the requirements of the EU Urban Wastewater Directive. The BSERP will extend the methodology to all of the Black Sea countries and, in cooperation with the DRP, review measures for compliance with national legislation and propose economic (incentives, fines) and technical solutions (appropriate and affordable technologies). This activity will be based around workshops organised with participants from relevant ministries, municipalities and local Government to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management.

109. For the success of the BSERP, it is essential that Governments, local administration and municipalities cooperate in providing necessary information and data. It is also important that the ICPDR and EMIS EG provide assistance to the BSERP to develop methodology as applied in Danube countries - Bulgaria, Romania and Ukraine.

110. Success criteria will include: (i) a Municipal Emission Inventory prepared for coastal zone of all BS countries by end 2004; (ii) a review of municipal "hot spots" in coastal zone for all BS countries and impact evaluated by mid 2005; (iii) an analytical report on existing legal and institutional instruments to control pollution from urban sources for RU, GE and TR available by end 2005 (based on methodology as applied in Danube countries) and concepts for harmonisation of national laws with EU requirements developed; (iv) mechanisms for compliance with legislation developed and concepts for economic and technical solutions developed for RU, GE and TR by mid 2006 and proposed to Governments for application; (v) concepts for revision of legislation and practical solutions for municipal wastewater treatment

are known and accepted by Government officials and stakeholders (municipalities, waterworks, NGOs) in RU, GE and TR though information and training in workshops organised in 2005.

111. Outcomes for Output 2.5: Policies and legal instruments for pollution reduction for the municipal sector:

1. Proposals are accepted for national/local policy options to improve collection of water and wastewater service tariffs and fees in all 6 Black Sea countries.
2. Effective mechanisms for identifying "hot-spots" based on the internationally accepted criteria, including the EU WFD, are developed by 2005 end. This will contribute to the updating/identifying of key hot-spots for both pollution and biodiversity/sensitive areas as a part of TDA and SAP.
3. Representatives from relevant ministries, municipalities and local Government are trained in approaches to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management.

Output 2.6 The Convention on Responsible fisheries finalised and proposals for fisheries-free zones developed, Preparatory activities on transboundary fish stock assessment completed.

112. The current irrational exploitation of fish stocks in the Black Sea has been recognised in the Black Sea Strategic Action Plan (Articles 58 and 59) through a call for the implementation of a number of specific measures to regulate fishing effort and to assess stocks. Additionally a new Fisheries Convention is being negotiated between all six Black Sea countries. In current circumstances, the heavy disturbance of the Black Sea floor by inappropriate fishing practices is unlikely to permit recovery of many of the habitats (such as Phyllophora beds). Unless an environmental dimension is introduced to fisheries management in the Black Sea, many of the potential benefits accrued by GEF funding of nutrient reduction will be lost. The present objective therefore seeks to provide technical support to the overall process of rational exploitation of marine living resources without undue interference with the delicate negotiations going on between the Black Sea countries on the new Convention. The promotion of modern approaches to management such as fisheries no take zones (sometimes known as stock replenishment zones) or Marine Protected Areas represents a powerful win-win solution however as it accrues benefits to the fisheries (especially where these have proven difficult to regulate because of illegal practices), to the natural environment (for biological diversity conservation) and to the local stakeholders (through diversification of employment).

113. The BSERP will assist the Black Sea Commission in developing a legally binding document on Fisheries in the Black Sea and support the negotiation process at the national level. This activity will be supported by the development a concept paper and methodology to reinforce the implementation of the future document on fisheries for the assessment of migratory population of fish species and their relationship with sensitive habitats and current fishing practices. The BSERP will also carry out the preparation and delivery of a study on sensitive habitats and nursery grounds, which will be used to prepare recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea with particular focus on the NW Shelf. Support will be provided to the BSC for the preparation of annexes on fisheries-free zones and marine protected areas to be introduced in the Protocol on Protection of Biological and Landscape Diversity of the Bucharest Convention. In order to disseminate information to the relevant stakeholders in each Black Sea country, the project includes an

activity to prepare and implement training and information seminars for the fishermen community on proposed fisheries-free zones and sustainable exploitation of fish resources in the Black Sea. There is a risk to the project that the national negotiation process may not go smoothly in obtaining agreement on a legally binding document on sustainable fishery management, and that the BSC may also not reach agreement in time for the preparation on the Annex for the establishment of fisheries-free zones and marine protected areas.

114. Success criteria include: (i) a legally binding document on Fisheries developed by end 2004 and the result of national negotiations reported and taken into account in the document; (ii) a report on the study on sensitive habitats and nursery grounds with recommendations for the establishment of fisheries-free zones and marine protected areas ready by end 2005; (iii) a concept paper and outline study on migrating fish population and nursery grounds available by mid 2005 and search for financial support initiated, and (iv) ensuring that the communities of fishermen are informed and conscious on sustainable fishing practices and fisheries free zones by end 2006.

115. Outcomes for Output 2.6: A legally binding document on fisheries and proposals for fisheries-free zones:

1, The text of the Fisheries Convention on Fisheries is finalised and presented to riparian governments by 2005 end.
2. Recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea are accepted by the BSC and riparian countries and a working plan is implemented in national strategies.
3. Fishing communities in the Black Sea countries are aware of the fishery free zones, as well as of principles of the sustainable exploitation of stocks in-line with national strategies.

4.2.3 Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems.

Output 3.1 Overall economic analysis carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances

116. The main activity within this objective is a socio-economic analysis of the application of economic instruments for protecting the Black Sea from pollution (with a special emphasis on nutrient control). The analysis will be conducted on a country by country basis using a carefully coordinated approach to ensure regional comparability. In this manner improvements may be suggested in order to attain regionally agreed objectives.

117. Guidelines and templates for the socio-economic analysis for Black Sea countries will be prepared in line with the methodological approach developed by the DRP for economic analysis under the EU WFD. The DRP has carried out such analysis in Bulgaria, Romania and Ukraine, and the BSERP will extend this analysis to the other Black Sea countries. This activity will also build on results of root cause analysis of environmental degradation carried out in Phase 1. Socio-economic analysis will be carried out at national level and will identify significant

deficiencies regarding water supply and wastewater legislation, including water pollution charges, fines and incentives. The PIU will organise consultation and information meeting with Government officials, national consultants and other holders of information to explore possibilities for cost recovery for water services. The results of socio-economic analysis will be summarised and disseminated at the national level to evaluate the mechanisms for cost recovery for water services in line with EU WFD guidelines. The PIU will prepare a summary report on socio-economic situation in Black Sea coastal countries and make judgment about the most cost-effective combination of measures in respect to reduction of nutrients and hazardous substances.

118. Success criteria will include: (i) guidelines and templates for socio-economic analysis prepared by end 2004 in line with existing methodologies; (ii) the production of national reports on socio-economic analysis available by mid-2005; (iii) consultation and information workshops organised end 2005 to amend and endorse national reports; (iv) a second draft of national reports available after workshop; (v) a summary report on socio economic analysis, focusing on coastal zones, including programme of measures for agriculture, industry and urban sectors with cost estimation and selection of most cost-effective solutions available by beginning 2006 and endorsed by the relevant BSC Expert Group.

119. Outcome for Output 3.1 Overall Economic Analysis:

Socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances by mid-2005

Output 3.2: Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones submitted to IFIs.

120. For the current project to be successful, it must assist the BSC to take measures that are financially sustainable. The lack of funding for environmental protection has been a perennial problem in the Black Sea region. Innovative approaches cannot simply be imported from the West as the circumstances of countries in transition are unique and complex; they must be created with full understanding of the priorities and economic realities of the region. Currently, environmental protection is not high on the political agenda though it is becoming increasingly important for the three countries seeking accession to the EU (Bulgaria, Romania, and Turkey).

121. It is important to have closer dialogue with the economy sector (treasuries, ministries of finance and economy), the private sector and with financial institutions such as the Black Sea Regional Development Bank. For the first phase of the project, a series of activities are underway, the results of which will enable the Commission to initiate pragmatic options for improving financing, especially in the regional context that parallels national action for the implementation of the Strategic Partnership. The project will further evaluate (i) the potential of the local and/or regional financial intermediaries (e.g. Black Sea Regional Development Bank) as a means of channelling funds to small/medium sized bankable projects in the Black Sea coastal zone, and (ii) opportunities for public-private partnership for investment projects in the Black sea costal zone (e.g., municipal water supply and wastewater treatment, fishing and fish processing, environmental friendly industrial production, e.g. production of phosphate-free detergents, new technologies in organic farming, etc.).

122. Phase 2 will include activities related to the preparation of investment programmes for municipal, industrial and other infrastructural projects in coastal zones of the Black Sea to reduce nutrients and hazardous substances affecting Black Sea waters and coastal ecosystems (in line with guidelines established by the DABLAS Task Force). Investment projects will be prioritised at the national and regional levels, taking into account environmental, economic and financial (bankability) considerations in applying DABLAS prioritisation methodology. The project will organise, in cooperation with DABLAS Task Force, a donor conference (IFI and bilateral donors) to mobilize financial support for the implementation of industrial pollution reduction, municipal WWTP and other infrastructural measures to protect coastal waters and ecosystems of the Black Sea.

123. Successful implementation of this activity will include: (i) investment programmes prepared in line with templates set up for DABLAS database by mid 2005 for municipal, industrial and other infrastructural projects for all Black Sea countries (coastal zones) and priorities identified; (ii) identification, by mid 2005, of potential local and/or regional financing institutions or intermediaries in RU, GE and TR; (iii) the potential for public private partnerships (list of firms or organizations) in RU, GE and TR identified by mid 2005, and (iv) holding a Donor Conference for Black Sea coastal zones organized in 2005 in one of the Black Sea countries presenting at least 20 priority projects for donor support.

124. Outcomes for 3.2 Investment programme for industrial and municipal wastewater treatment and other infrastructural measures:

1. Investment programmes prepared in line with templates set up for DABLAS data base (ICPDR) by mid 2005 for municipal, industrial and other infrastructural projects for all Black Sea countries (coastal zones) and priorities identified
2. A Donor Conference for Black Sea coastal zones organised in 2005 in one of the Black Sea countries presenting at least 20 small to medium sized priority projects for donor support.
3. Involvement of interaction between the private sector and GEF is further developed in the Black Sea countries (in-line with evolving GEF strategy).

4.2.4 Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention

Output 4.1: Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) developed for coastal zones and marine ecosystems in creating and introducing operational tools and indicators to evaluate changes over time in the coastal and marine environment

125. Phase 2 activities will continue to provide support to the BSC for the upgrading of the BSIMAP, including relevant chemical and biological indicators and optimisation of sampling sites, taking into account the main principles of the EU WFD for coastal and transitional waters, the forthcoming EU marine Strategy and other marine monitoring programs currently in use. In line with this activity, the project will further establish and implement QA/QC procedures including inter-institutional calibration exercises for chemical and ecological monitoring and the development of the laboratory Standard Operating Procedures (SOP). A training course will be delivered by the PIU on modern assessment techniques and the production of SOPs.

126. A specific aim of this activity to strengthen the capacitates of identified monitoring institutions through staff training as needed for improved ecological monitoring, and provide, where necessary, basic monitoring equipment. The project will provide financial support to the BSC to prepare a complete set of technical documents for the implementation for the operation of the BSIMAP (handbook), building on the results of the corresponding activities from the Tacis project. The sustainability of the BSIMAP is however questionable since national monitoring institutions may, in future years, lack necessary financial commitment from their Governments for the sampling and laboratory analysis prescribed.

127. As in Phase 1, the project will provide support for pilot projects designed to test the BSIMAP with emphasis on the harmonisation of methodologies for environmental (biological) status indicators, hazardous substances, spatial coverage and regional scopes. These pilot activities will be designed in cooperation with the BSC Permanent Secretariat and the Advisory Group on Pollution Monitoring and Assessment.

128. A pilot project will be designed, in cooperation with the Advisory Group for Environmental Safety Aspects of Shipping, to test the development of a Black Sea Vessel Traffic Oil Pollution Information System (VTOPIS). This will involve the investigation of the possible options for implementation of the digital selective calling transponders for automatic identification of ships in terms of geographical coverage and hardware. Commercially available software and hardware for similar information systems, including satellite remote sensing and the Marine Electronic Highway technology will also be assessed. A further pilot investigation will be conducted to test the effectiveness of radar satellite in the Black Sea region as an early warning system for the detection of oil slicks on the sea surface.

129. Success criteria will include: (i) a Black Sea Monitoring Programme based on relevant chemical and biological indicators, fully operational by mid 2005 with full cooperation of national institutions (laboratories) taking into account EU requirements for marine and costal zone monitoring and applying QA/QC procedures; (ii) monitoring institutions in all BS countries operational, (iii) the preparation, production and dissemination of a handbook for operation of BSIMAP; (iv) staff trained as needed and basic equipment (where necessary) supplied by mid 2005; (v) pilot project to test the monitoring program set up by mid 2005, running test program up to end 2006; (vi) laboratory technicians familiar with application of SOPs; (vii) a pilot project to test Black Sea Vessel Traffic Oil Pollution Information System developed by mid-2004 and the results available by end 2005.

130. Outcomes for Output 4.1: Black Sea Integrated Monitoring and Assessment Programme (BSIMAP):

1. BSIMAP becomes an effective tool for the monitoring and indicator-based assessment of the status and dynamics (including forecasts) of the Black Sea ecosystem by 2007.
2, BSIMAP provides indicator based reporting of the state and trend of the nutrient (and hazardous substances) loading to the Black Sea.
3. Practical tools are developed to demonstrate the effectiveness of VTOPIS in the Black Sea through a pilot project by 2005 end.

Output 4.2: Black Sea Information System including tools for GIS, mapping and remote sensing developed to support the activities of the BSC and implementation of the BSSAP.

131. Project activities will continue to support the development and the operation of the Black Sea Information System (BSIS), administered at the premises of the BSC/PIU (intranet) and ensure that it is widely used by all Black Sea expert bodies, activity centres and other operational bodies under the Black Sea Commission, as well as accessible to the public (internet). Improved reporting formats according to the needs of the BCS will be produced with user friendly interface to assure coherent and analytical presentation of data and information. In Phase 2 the PIU will link all Contracting Parties of the Black Sea Commission to the BSIS, which implies the establishment of operational units at the national level to communicate also in case of accidental emergency situations. The PIU will also assure links with regional and global information systems (e.g. SeaSearch, Black Sea GOOS, DANUBIS, Black Sea Database etc).

132. Special interactive web sites will be prepared by the PIU for public information and response with particular attention to new technologies in the agricultural and in the industrial sectors (BAP/BAT), in urban wastewater treatment, coastal zone management, etc. The project will develop and operate the Black Sea GIS including textual, numerical and digital mapping information, as well as appropriate data base and reporting formats. In cooperation with the Joint Research Centre (JRC), the project will manage the downloading, interpretation and distribution (on a regular basis agreed by the BSC) of SeaWifs colour scan satellite data, and assure extended use of GIS. Further assistance will be provided in preparing coherent outline and drafting of the State of the Environment Report, as required by the BS SAP; Training will be initiated at the national level, by means of a series of workshops, to train users in the best use of the tools made available by the system (interactive web site, update of database, etc).

133. The project support structure will be used to ensure that the Black Sea Contracting Parties provide in time and quality information needed to compile the Annual status report, and that Governments be provide the timely delivery of information required for production of regional Black Sea maps and other data and information for GIS. There is a risk to the sustainability of the BSIS since the BSC might not have sufficient funds to assure future operation and maintenance of the information system.

134. Success criteria will include: (i) State of the Environment Reports (annual and 5-year); (ii) a Black Sea Information system fully established and operational by mid 2005 within intranet area and for the public access (Internet) and operational units established at national level in all BS countries to facilitate exchange of information and emergency messages; (iii) a Black Sea GIS including mapping tools and download of satellite data operational by end 2005 and accessible by all contracting parties and public users; (iv) training of members of BSC bodies and staff of national operational units or information centres as well as NGO representatives by 2005 to make full use of the BS Information System.

135. Outcomes for Output 4.2: Black Sea Information System including tools for GIS, mapping and remote sensing:

1. Management of information for the BSC on work to manage the Black Sea basin enhanced for 50 experts involved in the BSC (Secretariat, RACs, FP, experts working groups etc.) by the improvement of the BSIS as evidenced by an expansion of the information available as well as the use of the system.
2. The data exchange and reporting procedures within the implementation of the Bucharest Convention (RACs, FPs, BSC/PS), as well as with the EEA is supported by the BSIS.
3. Increased public awareness of Black Sea problems, issues and solutions (including initiatives of the BSC, NGOs etc.) due to an improved, more user-friendly and interactive BSC and project web sites respectively as evidenced by an increase in hits to the web pages from 500 hits per month in 2003 to 2,000 hits per month in 2006.

Output 4.3: Research Programme designed and implemented to assess input of nutrients and hazardous substance in the Black Sea

136. The main issue to be to examined in order to develop a coherent environmental management-driven research programme, is what are the main gaps in setting targets for nutrient control in the Black Sea and how can these be closed or reduced by good and cost-effective science. It is important that the International Study Group (ISG) formed during Phase 1 should continue to represent a joint planning exercise. Holistic oceanographic research always involves complex planning in order to match the requirements of different research groups. The work has been designed to incorporate the latest techniques for oceanographic research use. The results of the studies must be fully credible to external reviewers at the end of the process. This work must not be regarded as a pretext for routine monitoring nor a capacity-building exercise. The task is clearly to solve or reduce the scientific uncertainties that may impede the process of reducing eutrophication in the Black Sea. Research activities have been designed so that local scientists will benefit greatly by (a) having access to new techniques, (b) working with the best specialists in the region in other related fields, (c) sharing information and, (d) publishing first class scientific papers. The PIU will prepare and organise a scientific Black Sea Conference in 2006 to present and discuss results from all ISG activities including results from surveys and identify further knowledge gaps.

137. Two survey cruises will be carried out in the Black Sea with special emphasis on impact assessment in the NW Shelf based on research programme agreed in Phase 1 (Aug/Sept 2004 and Jan. 2005). The project will identify sources for additional funding to extend present programme to other recognized impact areas of the Black Sea. The project will continue to support other research activities initiated by the ISG in Phase 1. These include the monitoring of riverine input and remote sensing activities of chlorophyll-a.

138. An essential research activity will be carried out in Phase 2 to assess the impact of atmospheric deposition of nutrients to the Black Sea. This will involve the setting-up of simple collection stations throughout the Black Sea coastal region to monitor the annual rate of deposition of nutrients and particle-bound pollutants. The movement of atmospheric pollutants from the land to the Black Sea and their content in the sea will be calculated using a combination of meteorological models designed under the EU ARENA project and nutrient analysis undertaken during the research cruises.

139. The project will also support the development of a rapid assessment methodology for diffuse and point sources in the Black Sea basin (taking into account the developments of the DANUBIS models). The rapid assessment methodology, devised by the University of Plymouth, will be tested in the Black Sea region. The activity will involve the collection of data on a

national level for potential loads and effective loads of nutrients to surface and groundwater, each divided into domestic, industrial, livestock, arable farming, and atmospheric/background loads. Basic loading factors and export coefficients have been derived by the University of Plymouth and algorithms defined to automatically adjust these values according to commune-specific considerations. The results of the study will provide essential information required for priority planning of nutrient reduction strategies by the BSC.

140. Finally, under this activity, a desk-study will be conducted in cooperation with the DRP to determine the need to reduce phosphorus in detergents. The objective of the study will be to obtain baseline information and evaluation of transaction cost for the Black sea riparian countries.

141. Success criteria will include: (i) results of first survey cruises available during 2005 and funds requested for additional extension of survey cruises to other recognized impact areas; (ii) a scientific study on nutrient inputs by atmospheric deposition concluded by end 2006; (iii) models adapted and tested building up on the results of regional pilot project(s) for nutrient export from point and diffuse land-based sources; (iv) a report on baseline data on phosphorus in detergents and estimation of transaction costs available end 2004, and (v) scientific documents prepared and Black Sea Conference organized in 2006.

142. Outcome for Output 4.3: Research Programme designed and implemented:

> Knowledge on the functioning of the Black Sea ecosystem is improved and results of the target-based research programme are integrated in the decision making process (e.g. setting of realistic water quality objectives, assessment of impacts and their effects, etc.)

4.2.5 Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

Output 5.1: NGOs structures and activities reinforced though support for institutional development and community actions in awareness raising, training and education[7] on the issues related to the management of nutrients and hazardous substances.

143. It is important to clarify that the project will not act as a direct funding mechanism to the existing/future structures of NGO Coordination in the region. The project will continue to support their projects, submitted on a competitive basis, and their participation in specific events. The objective is to act as a resource centre that will allow the regional NGO movement to develop and flourish without outside influence.

144. The PIU will develop criteria and evaluate the effectiveness of NGOs in environmental protection of the coastal and marine ecosystems (on the basis of Phase I Small Grants Programme) and design programme the implementation of the following activities: (i) support to the "Umbrella" NGOs through capacity building in form of regional consultation meetings and reinforcement of communication and information management; (ii) organising stakeholder

[7] Coordinate NGO support with GEF DRP to assure coherence in approach and join resources for NGO support (training, information management, etc.)

training in environmental protection of coastal areas (with emphasis on nutrient and hazardous substances) and protection of marine ecosystems as part of the Train Sea Coast programme, and (iv) to support the production and distribution of NGO publications in national languages on nutrient reduction and hazardous substances. The project will strive to (i) enhance cooperation between Government and NGOs, (ii) increase the professional capacities in NGOs and to improve their capacities and experience in fund raising.

145. As mentioned above, the project activities will support the on-going work of Train Sea Coast (TSC) programme in order to provide stakeholder training for nutrient reduction. This project provides tailor-made demonstration-level training with a high degree of replicability. The TSC is a GEF funded programme for conducting training needs analysis and developing a joint menu of training courses tailored to the specific needs of the GEF IW Projects. The United Nations Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs (UNDOALOS) coordinates and acts as the Central Support Unit of the TRAIN-SEA-COAST Programme. The TSC has established a Black Sea Course Development Unit in Romania and have trained experts on the standard methodology employed by the TSC. The Black Sea TSC Course Development Unit, in close cooperation with the PIU has recently developed a training course on the impacts of the agriculture sector on water and soil pollution, in particular on eutrophication. Following course validation by the Central Support Unit, the project will support the delivery of the course to a core group of agricultural specialists and or managers of farming establishments from the region who will further train farmers.

146. Success criteria will include: (i) the development, by end 2004, of set of criteria to evaluate the effectiveness of NGOs in environmental protection; (ii) optimal operation of Black Sea NGO umbrella organisations achieved by 2006; (iii) increased knowledge and awareness of NGOs on coastal zone management, reduction of nutrients and toxics are improved by mid 2005, and (iv) the regular publishing in national languages of NGO publications related to nutrient and hazardous substances.

147. Outcomes for Output 5.1: NGOs structures and activities reinforced:

1. Community involvement increased through an expanded and strengthened network (5 times increase of NGOs involved within the life-time of the project) to undertake awareness raising and pollution reduction activities in 6 Black Sea countries;
2. Sustainable operation of the "Umbrella NGOs" achieved , leading the further expansion and effectiveness of the network;
3. Active involvement of the "Umbrella NGOs" members in policy development and pollution reduction activities assured through partnerships with the national governments (e.g. activities to involve the public in the Management/Planning process in the frame of the EU Water Framework Directive etc.)
4. The Black Sea Day will continue to be an annual event and a platform to raise awareness on control of nutrients and hazardous substances in riparian countries.
5. BSC/PS has become a public oriented institution through enhanced quality of communication and by using awareness raising tools and sustainable means of communication (including periodic ones) and the web-page.

Output 5.2: Community actions for awareness raising and environmental protection implemented with funding from GEF "Small Grants Programme" targeted specifically at the support/participation in the management of nutrients and hazardous substances

148. A Small Grants Committee will be established to formulate a detailed proposal for a transparent mechanism to review and prioritise a second tranche of proposals, for implementation in the second phase of the project. The committee will define the type of projects eligible for GEF SGP support and will develop methodology and procedures for selection of projects, follow up of programme implementation and final evaluation of results. Following discussion and eventual approval of this mechanism by the Steering Committee, a second call shall be issued and evaluated. For the second tranche, the committee will identify, in line with above methodology, a selection of projects from NGOs in the Black Sea countries aimed at reduction of nutrients and hazardous substances in the frame of coastal zone management and protection of marine ecosystems. The PIU will ensure an evaluation the results of the second tranche of community-based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluator. The evaluation will focus on professional capacities in NGOs to reach expected results, their project management and use of funds, reporting skills and level of cooperation from local administration or Government.

149. Success criteria will include: (i) an evaluation report on results of 1st tranche of SGM available by mid 2004 allowing recommendations to be taken into account for implementing 2nd tranche of SGP; (ii) a methodology and procedures prepared and selection of projects for implementing 2nd tranche of SGP is achieved by end 2004; (iii) efficient and effective NGO involvement in coastal zone management and pollution control through good organisation and careful follow up of SGP implementation (end 2004 to end 2006), and (v) an evaluation report on implementation of 2nd tranche of SGP available by 2007.

150. Outcomes for Output 5.2: Community actions for awareness raising and environmental protection:

1. Awareness of nutrient pollution and hazardous substance problems in the Black Sea basin and involvement of the Black Sea communities in 6 countries enhanced via 15-20 national small grant funded projects led by national environmental NGOs;
2. NGOs play a significant role at the national/local level to ensure effective consultative mechanisms between the local/national governments and a wider public.

Output 5.3: Public information on reduction of nutrients and hazardous substances, their effect on the Black Sea ecosystem, and the recovery measures are disseminated to the public at large (i.e., by means of the Communication Strategy, Educational Programme, Public awareness campaigns, media coverage

151. Phase 2 will further conceptualise and implement, in line with Communication Strategy developed in Phase I, public information and awareness raising campaigns on sustainable coastal zone management and protection of coastal and marine ecosystems in all Black Sea countries (to be translated in national languages by Governmental department or NGO concerned). The project will also continue assistance in developing and producing information material on management of

coastal zones and marine ecosystems (with focus on eutrophication), reduction of nutrients and hazardous substances, recovery of Black Sea ecosystems, sustainable fisheries, etc.

152. The project will employ a Public Relations Officer from the region to continue to develop and produce, in line with Communication Strategy, materials for public press and mass media on subjects related to management of coastal zones and marine ecosystems (with focus on eutrophication and sustainable fisheries), reduction of nutrients and toxic substances, and recovery of Black Sea ecosystems. The public relations officer will further develop an interactive web site for public information and response (see also Activity 4.2.5). In relation to the mass media, the PIU team will act to encourage the production of a popular documentary film on the Black Sea environmental protection based on the script developed in Phase I and identify relevant sources for financial support (Donors, IFIs, other stakeholders). It must be assumed that the script developed in Phase I is supported by all of the potential sponsors of the film production.

153. Further support will be provided to promote environmental education in schools through the development and introduction of specific messages for nutrient reduction and sustainable management of the coastal zone and marine ecosystems (through the Black Sea Environmental Education Programme, BSEEP). At the end of the project, the effects and impact of public information, education and awareness raising campaigns will be evaluated according to GEF procedures for monitoring and evaluation. In an attempt to promote environmental issues to the public as a whole, it is important for the Government to participate in awareness raising campaigns. It is apparent that NGOs may play an important role if financial incentives will be provided.

154. Success criteria will include: (i) evidence that decision makers of public and private sector, opinion leaders and the general public are better informed and sensitised on issues related to coastal zone management and protection of coastal and marine ecosystems (continuous until end of the BSERP); (ii) sufficient and reliable information for mass media purposes, prepared and published (continuous until end of the BSERP); (iii) environmental education in schools introduced through BSC/BSERP initiative by mid 2006; (iv) the identification of funding sources for the documentary film by end 2005 and its production by 2007; (v) basin-wide information material on management of coastal zones and marine ecosystems, reduction of nutrients and toxics, sustainable fisheries, etc., periodically published and presented on interactive web site for public information and response (continuous until end of BSERP), and (vi) an evaluation report on results of communication strategy and awareness raising activities available in 3/2007.

155. Outcome for Output 5.3: Public information and awareness for environmental issues reinforced:

> Awareness of public in overall Black Sea on the importance of pollution reduction and environmental challenges has been enhanced through targeted communication activities and campaigns (farmers, municipalities, wetland mangers, environmental NGOs, etc.)

5 INPUTS

5.1 Government Inputs

156. All six Governments continue to be strongly committed to the enhancement and implementation of the BSSAP, and to the attainment of the project objectives, in particular reduction of nutrients and other toxic substances discharging into the Black Sea. In all coastal states, substantial reforms in the legislative framework for environmental protection are on their way, and investment programmes which are financed through state and local budgets and other sources cover Black Sea hot-spots.

157. Each Government will provide necessary staff time and facilities with a view to ensure that the national coordinating mechanisms are functioning in a proper and timely manner, and governmental institutions and other stakeholders actively participating in the activities and mechanisms for the current project. At the national level, this involves improved performance of environmental institutions, including inspectorates; enhanced policy integration with other sectoral ministries; and facilitation of public awareness and stakeholder participation. At the regional level, it involves fulfillment of the programmatic and budgetary commitments made *vis-a-vis* the Bucharest Convention and the BSSAP.

158. The total input of the Black Sea countries amounts to USD 812,046,589 (see Table 6 below).

Table 6 Summary of Input of the Black Sea Countries (2004-2006)

Country	USD	% of Total
Bulgaria	309,632,812	39.2%
Georgia	6,686,400	0.8%
Romania	328,357,920	41.6%
Russian Federation	58,884,211	7.5%
Turkey	1,488,549	0.2%
Ukraine	83,926,784	10.6%
Sub-Total	**788,976,676**	**100%**
Associated Financing (Bilateral, EU and NGO)	23,069,912	
Sub-Total	**23,069,912**	
TOTAL	**812,046,588**	

159. A more detailed description of the funding available in each of the Black Sea countries, as well as a breakdown of inputs are presented onwards in this section.

5.1.1 Bulgaria

160. The foreseen expenditures on the Black Sea protection activities for the period 2004-2006 from the Bulgarian government and international donors total to USD 317,904,774 (see Table 9) and will comprise of:

a) Sewerage and sewage treatment plants construction works – Danube and Black Sea basin (source - Programme for implementation of Directive 91/271) (see Table 7),

Table 7 Sewerage and sewage treatment plants construction works in Bulgaria

River Basin	Euro	Rate	USD
Vit basin	3,915,000	1.24378	4,869,399
Dobrudzha basin	14,995,000		18,650,481
Danube basin	5,783,000		7,192,780
Iskar basin	35,732,000		44,442,747
Kamchia basin	26,961,000		33,533,553
Ogosta basin	15,852,000		19,716,401
Osam basin	17,970,000		22,350,727
Provadijska basin	6,423,000		7,988,799
Rusenski lom basin	15,525,000		19,309,685
Black Sea coast	51,889,000		64,538,500
Yantra	28,900,000		35,945,242
Total	**223,945,000**		**278,538,312**

b) Projects running - international funding

Table 8 Internationally Funded Project in Bulgaria within 2004-2006

Project	Donor	Euro	Rate	USD
Integrated monitoring Bulgarian BS coast	PHARE	2,150,760	1.24378	2,675,072
Institutional strengthening of Danube basin directorates for implementation of the WFD	PHARE twinning	1,000,000		1,243,780
Pilot project for environmental risk assessment in the lower Danube and Iskar	Republic of Italy	500,000		621,890
Total		**3,650, 760**		**4,540,742**

c) Scientific projects and activities of the Institute of Oceanology – Varna, funded by the Bulgarian government and international donors - 15 projects related to the Black Sea environment – approximately Euro 3,000,000 (USD 3,731,220).

d) Landslides - restoration and prevention activities – programme of Oblast Varna - Euro 25,000,000 (USD 31,094,500)

Table 9 Total Input from Bulgaria within 2004-2006

River Basin	Euro	Rate	USD
Sewerage and sewage treatment plants construction works in Bulgaria	223,945,000	1.24378	278,538,312
Internationally Funded Project in Bulgaria within 2004-2006	3,650,760		4,540,742
Scientific projects and activities of the Institute of Oceanology – Varna	3,000,000		3,731,220
Landslides - restoration and prevention activities	25,000,000		31,094,500
Total	**255,595,760**		**317,904,774**

161. A copy of the official letter from the Deputy Minister of the Bulgarian Ministry of

Environment and Water containing the information above is included in Appendix G.

5.1.2 Georgia

162. Input from Georgia are presented in Table 10. A copy of the official letter containing the information above is presented in Appendix G.

Table 10 Total Input from Georgia within 2004-2006

Project	USD
1. Integrated Coastal Management Project	
- the WB loan to the Georgian government	4,400,000
- GEF grant	1,300,000
- Grant provided by the government of the Netherlands	1,000,000
- Contribution of the Georgian government	900,000
Sub-Total	***7,600,000***
2. Programmes of the government of Georgia for the rehabilitation and protection of the Black Sea environment (estimate has been made prorated on the basis of 2004)	
- Flood protection (Rioni River basin) – 3*31,000 GEL (1 USD=2.12 GEL)	43,900
- Artificial restoration of stock of sturgeon species (3*30,000 GEL)	42,500
Sub-Total	***86,400***
TOTAL	**7,686,400**

5.1.3 Romania

163. Input from Romania (both governmental and from bilateral donors) will total USD 332,553,190 .in the coming years. The activities will mainly include projects related to the upgrading of the WWTPs and rehabilitation and protection of the coastal zone against erosion, as well as the EU funded activities and support from the government of the Netherlands. Details of the Romanian contribution are presented in Table 11 below. A copy of the corresponding official letter from the Ministry of Agriculture, Forests, Waters and Environment is included in Appendix G.

Table 11 Total Input from Romania within 2004-2006

Project	Euro	Rate	USD
1. WWTPs upgrading, rehabilitation of sewage network, waste water pumping stations, rehabilitation of waste water discharging pipelines (repair, extending, diffusion systems)	96,000,000	1.24378	119,402,880
2. Rehabilitation and protection of the	168,000,000		208,955,040

coastal zone against erosion (light and heavy solutions, monitoring) – Prorated from 2004-2008.			

Project	Euro	Rate	USD
3. Implementation of the WFD and ICZM in transitional and coastal waters in Romania	503,000		625,621
4. PHARE Integrated Monitoring of the Black Sea littoral between Midia and Vama Veche	2,870,000[8]		3,569,649
Total	**7,686,400**		**332,553,190**

5.1.4 The Russian Federation

164. According to the Governmental decree of the Russian Federation No 581 from 08/08/2001 the Federal Targeted Programme "South of Russia" has been established, which included a series of measures on the construction of WWTPs in the territory of the Black Sea basin (including the Azov sea basin). The measures are accounted for the period to 2006.

165. The Programme is directed at the creation of needed conditions for the sustainable development of the southern territories of Russia, as well as at the improvement of the socio-economic situation. The Programme includes the implementation of a number of projects and measures for improvement of the present state of water resources, continuation of the present pace of the development of municipal systems, prevention of emergency situations, rehabilitation of the water ecosystems.

166. A detailed distribution of funds within the Programme "South of Russia" is presented in Table 12 below. A copy of the official letter is included in Appendix G.

Table 12 Total Input from Russia within 2004-2006

Activities	Year(s)	RUB	Rate	USD
General Env. Measures	2003	144,000,000	28.5	5,066,667
General Env. Measures	2004	316,800,000		11,115,789
Contribution of enterprises	2004	250,000,000		8,771,930
General Env. Measures not incl. in item 2.	2004-2006	967,000,000		33,929,825
	Total	**1,678,200,000**		**58,884,211**

5.1.5 Turkey

167. The contribution from the Turkey comprises the two projects approved by the State Planning Organisation for 2004 within the Investment Programme for Turkey and a EU funded

[8] Contribution of the Romanian government for this project is 670,000 Euro.

project “Identification of Heavy Investment Projects In-Line with Environmental AQUIS”. To estimate the Turkish input for the period 2004-2006, the corresponding amounts were proportionally increased. A more detailed breakdown is presented in below. An official letter from the Ministry of Environment and Forests of Republic of Turkey is included in Appendix G.

Table 13 Total Input from Turkey within 2004-2006 (Estimates are based on 2004 amounts)

Project	TRL	Rate	USD
National Action Plan for the Land Based Pollution Sources	200,000,000,000 *3 years	1,310,000	458,015
Pollution Monitoring and Assessment	450,000,000,000 *3 years		1,030,534
	Euro	**Rate**	**USD**
Identification of Heavy Investment Projects In-Line with Environmental AQUIS	6,000,000	1.24378	7,462,680
Total			**8,951,230**

5.1.6 Ukraine

168. National and international programmes and activities aimed at the improvement of the Black Sea Environment scheduled for 2004 total USD. A summary presented in , and a detailed breakdown is included in the official letter from the Ministry of Environmental Protection of Ukraine (see Appendix G).

Table 14 Total Input from Ukraine within 2004-2006 (Estimates are based on 2004 amounts)

Activities	UAH	Rate	USD
National Funding	447,329,800	5.33	83,926,784
International Funding			2,140,000[9]
Total			**86,066,784**

5.2 Input of the Black Sea Commission (BSC) and BS Countries contributions to the Black Sea Commission

169. The Black Sea Commission has approved the Black Sea Ecosystem Recovery Project and included actions to support the project objectives into its own work-programme and budget. Moreover, the working programmes of the BSC (Appendix C, item 2) and BSERP have been closely coordinated and lined up. A detailed explanatory note provided by the Permanent Secretariat of the BSC is included in Appendix E. A summary of the note is presented in Table 15.

Table 15 Summary Table of the BSC and BS Countries Contribution, USD

Budget Item	2003-2004	2004-2005	2005-2006	Total
BSC Budget	261,360	261,360	261,360	**784,080**

[9] This amount does not include a Tacis Project "Black Sea Investment Facility" (EuropeAid/116448/C/SV/Multi), which is presented in this chapter separately as an EU input.

BSC AGs	118,000	118,000	118,000	**354,000**
Joint Activities	0	0	0	**0**
Others	44,776	44,776		**89,552**
Total, USD	**424,136**	**424,136**	**379,360**	**1,227,632**

170. Work-programme and budget of the Black Sea Commission for the period 1 July 2004 – June 2007, and the indicative budget and work-programme for 2003 – 2004 is given in Appendix C. The Government of the Republic of Turkey is also providing the facilities for the PIU in accordance with the "Memorandum of Understanding between the Government of the Republic of Turkey and the United Nations Development Programme on the establishment of the Project Implementation Unit of the project entitled 'Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem: Phase1' and subsequent projects" given in Appendix C.

171. The Governments have also agreed to expand their cooperative action to safeguard the Black Sea beyond the immediate political borders of the Black Sea, and through the Black Sea Commission, have negotiated a Memorandum of Understanding on common strategic goals with the International Commission for the Protection of the Danube River (ICPDR). The European Commission has also decided to support this cooperation process. The Draft MOU which is given in Appendix C.

5.3 GEF Inputs

172. The GEF has allocated an amount of US$ 4,000,000 for the implementation of this project phase (not including the PDF-B of $349,920), as well as US$ 5,500,000 for the second phase. According to the estimates of the real needs to implement Phase 2 it is requested a 5% increases to the amount allocated for Phase 2. The amount requested for Phase 2 total US$ 5,768,000.The indicative timeframe for the Phase 2 is July 2004-June 2007. The total amount of the GEF input is estimated as US$ 10,117,920.

5.4 UNDP Inputs

173. As the Implementing Agency, UNDP will support the Strategic Partnership and the Black Sea Ecosystem Recovery Project through interventions in UNDP Environment and Governance focus areas under Country Cooperation Frameworks and Regional Cooperation Frameworks. It will backstop the project with its own staff members and financing both from the headquarters and locally from the Country Offices in all six coastal states. The UN Resident Coordinator and the Representative of the UNDP in Turkey will be the Principal Resident Representative for the Project. He will be kept informed of all substantive developments of the Project for his onwards coordination with the Government of the host country as well as with UN Resident

Coordinators/UNDP Representatives in other beneficiary Governments and other international organizations with a view to better integrate other activities at the country/region level with GEF programming.

174. UNDP provides support to Danube/Black Sea basin issues through projects in the environmental focus area such as:

- Bulgaria: National Capacity Self-Assessment for Global Environmental Management ($198,300; 2002-2004)
- Bulgaria: Biodiversity Enabling Activities ($404,706; 1998-2003)
- Ukraine: Urban Environmental Governance ($100,000; 2003-2006)
- Ukraine: Chernobyl Recovery Program ($325,000; 2002-2005).
- Georgia: Capacity Building for the Ministry of Environment ($500,000; 1998-2003)

175. The Strategic Partnership for the Black Sea and Danube River Basin has a strong focus on facilitating legal, policy and institutional reform in support of transboundary pollution reduction. These new laws, policies and institutions can only be effective if they have the appropriate level of trust, legitimacy and credibility in civil society. In addition, as has been the case in the West, environmental protection is being propelled more and more by public demand. UNDP is supporting the empowerment of individuals and NGOs with skills and information to increase their involvement in the environmental policymaking and enforcement processes. For the next two years UNDP will provide assistance totaling nearly $10 million to the Black Sea riparian countries in support of governance, democracy and public participation. Also, nearly $ 3 million will be provided to the Black Sea riparian countries through the Energy and Environment Programme of UNDP during next two years.

176. In addition, through the GEF Small Grants Programme in Turkey, UNDP supported project on protection of the sturgeon, a threatened the Black Sea fish ($30,000, 2000-2003).

177. Through its ongoing support to Environment and Governance in the Central European and CIS countries, UNDP will continue to provide the framework for successful implementation of the key reforms envisioned under the Programmatic Approach. Within the next two years UNDP will support, *inter alia*, the following projects which support the goals of the current project:

- Implementing Local Agenda 21's in Turkey: (launched in 1997); $1,000,000.
- Turkey: National Programme to Combat Desertification; $200,000.
- Ukraine: Governance Programme (increasing citizen participation in governance processes, reform of public sector institutions, increasing accountability and transparency

in government, and decentralization and strengthening of local government); launched in 2002; $1,300,000.

178. The total input of the UNDP is estimated as US$ 16,325,000 (see Table 16).

Table 16 Total UNDP input (Estimated)

Activities	USD
Bulgaria: National Capacity Self-Assessment for Global Environmental Management	198,300
Bulgaria: Biodiversity Enabling Activities	404,706
Ukraine: Urban Environmental Governance	$100,000
Ukraine: Chernobyl Recovery Program	325,000
Georgia: Capacity Building for the Ministry of Environment	500,000
Support of governance, democracy and public participation in the BS countries	10,000,000
Energy and Environment Programme for the Black Sea countries	3,000,000
Implementing Local Agenda 21's in Turkey	1,000,000
Turkey: National Programme to Combat Desertification	200,000
Ukraine: Governance Programme	1,300,000
Total	**16,325,000**

5.5 UNEP Inputs

179. UNEP will provide experienced specialist personnel for implementing the following elements of this project assigned to it through an Inter-Agency Agreement:

- to lead the process of reviewing and revising the legislative background and support further implementation of the GPA process in the region under the guidance of UNEP through an inter-agency agreement.
- Identification and analysis of emerging transboundary problems and evaluation of the cost effectiveness of interventions to correct current and emerging transboundary problems.

5.6 EC-TACIS (EuropeAid) Inputs

180. The European Union is a major political and financial actor in project area mainly through its enlargement and NIS relations' policies. The enlargement of the EU to the thirteen candidate countries, three of which are the beneficiary countries for the current project (Bulgaria, Romania, and Turkey) will involve:

- The adoption and implementation by these countries of the EU environmental legislation and standards as a prerequisite for their entry into the Union
- The financial assistance by the EU to these countries toward the development of the infrastructures necessary for the implementation of the EU legislation

181. The financial assistance will involve primarily the pre-accession financial instruments PHARE, ISPA, SAPARD, and others as appropriate. These amounts have been included in the corresponding paragraphs of this section.

182. A separate regional activities is the Tacis Project "Black Sea Investment Facility" (EuropeAid/116448/C/SV/Multi), which totals to EUR 3,300,000. This amount has been indicated by the Ukrainian Ministry of Environmental Protection (Appendix G).

Table 17 Total EuropeAid Input (estimated) within 2004-2006

Project	Euro	Rate	USD
Project "Black Sea Investment Facility"	3,300,000	1.24378	4,104,474

6 INCREMENTAL COSTS ANALYSIS

6.1 Broad Development Goal

183. The Black Sea Basin is an extensive unique ecosystem in which the balance between the non-living and living resources on one hand and human population on the other has been repeatedly disturbed. Due to the numerous environmental disturbances the ecological status of the Black Sea changed drastically. All riparian countries, as well as numerous donor countries and a number of the International Financial Institutions are urgently seeking to address the environmental protection of transboundary waters under the Bucharest Convention.

184. The current economic conditions of the countries in transition do not allow them to fully respond to the needs for environmental protection and implementation of pollution control measures. Therefore, the GEF project will assist the countries in transition to respond to regional and global environmental issues with particular attention to pollution control and nutrient reduction. The Black Sea Transboundary Diagnostic Analysis (1996) indicates that, in 1992, 70% of the nutrients were coming from the six Black Sea countries (three of which - Romania, Bulgaria and Ukraine - discharge much of their nutrient load through the Danube) and the remaining 30% comes from the non-coastal countries, mostly of the upper Danube.

- Significant degradation of water quality and ecosystems
- Increased nutrient loads to the Black Sea
- Reduced quality of life and human health
- Limited capability to create a sustainable mechanism for co-operation that will be embodied in an international legal and policy framework for co-operation in protection and sustainable use of the Black Sea resources.

185. The long-term development objective of the current Project is to contribute to sustainable human development and promotion of economic activities in the BSERP through reinforcing the capacities of the participating countries in developing effective mechanisms for regional cooperation and coordination, in order to ensure protection of international waters, sustainable management of natural resources and biodiversity.

6.2 Baseline

186. The need for protection and management of the Black Sea Basin environment and its resources has preoccupied the riparian countries for many years. Recently, largely as a consequence of the development of previous interventions of the UNDP/GEF Black Sea

Ecosystems Recovery Project, there has been an increasing awareness that legal measures and projects to reduce emissions from point and non-point sources of pollution are urgently needed, in particular measures that will substantively contribute to reducing the transport of nutrients, in particular nitrates to the Black Sea.

187. However, national mechanisms for pollution control in transition countries are often not fully operational and the inter-ministerial structures for transboundary cooperation in water related environmental issues are weak or missing in most, if not all, of the countries. Ongoing programs form an important part of the project baseline. In addition, there is financial support being provided by international and bilateral organisations. Contributions came from EU TACIS/EuropAid, GEF/UNDP, the World Bank, and other multilateral and bilateral donors as well as from international NGOs.

6.3 Global Environmental Objective

188. The global environmental objective of the current project is to ensure a regional approach to (i) the development of national policies and legislation and, (ii) the identification of priority measures and actions for nutrient reduction and pollution control, so as to obtain maximum long-term benefits while protecting human health and ecological integrity and ensuring sustainability.

189. The potential global and regional benefits are likely to be substantial, including the protection of international waters, sustainable management of natural resources and the maintenance of a diverse aquatic ecosystem. The project will also develop effective mechanisms for regional co-operation and co-ordination geared towards the implementation of pollution control and nutrient reduction measures. The GEF interventions will be accompanied by the current support through bilateral and multilateral programmes in the basin.

6.4 GEF Project Activities

190. GEF will provide the catalytic support for incremental costs associated with the development of nutrient reduction policies and the creation of efficient mechanisms for regional co-operation under the Bucharest Convention to assure efficient control and monitoring of transboundary benefits of the reduction of nutrients and hazardous substances within the Black Sea Basin.

191. The approach would be consistent with the guidance for the GEF "Waterbody-based Operational Programme." For this project, the goal is to assist the Black Sea countries in making changes in the ways that human activities are conducted in different sectors so that the Black Sea and its multi-country drainage basin can support in a sustainable manner the human activities. Projects in this Operational Programme focus mainly on seriously threatened water bodies and

the most imminent transboundary threats to their ecosystems as described in the Operational Strategy. Consequently, priority is placed on changing sectoral policies and activities responsible for the most serious root causes needed to solve the top priority transboundary environmental concerns which is given for this present project by the pollution and nutrient reduction.

192. The GEF alternative would support the proposed project in:

- Developing nutrient reduction policies and legal instruments and measures for exacting compliance;
- Strengthening institutional mechanism and building capacity for transboundary cooperation in nutrient reduction;
- Raising awareness and reinforcing NGO participation in implementing "Small Grants Programme";
- Strengthening the monitoring and information mechanisms on transboundary pollution control and nutrient reduction.

193. This regional project represents a motivating case in which the improvement of transboundary co-operation and co-ordination will help the BSC and the countries to reinforce their efforts aimed at an efficient implementation of the BSSAP.

194. In addition, improved transboundary co-operation will provide a better basis for the sustainable use of natural resources and the conservation of biological diversity in the Black Sea basin. The cost of doing this is evidently incremental to the national efforts of all thirteen countries, focused on maximising environmental benefits through comprehensive global and domestic environmental management strategies.

195. In its 1st Phase, the Project has reinforced existing implementation mechanisms, analysed and initiated preparation of the methodological and practical approaches for various project components and organised workshops to train experts/specialists from the riparian Black Sea countries in technical, legal and economic aspects of management of coastal zone and protection of marine ecosystems, as well as pollution reduction. The 2nd Phase of the Project will build up on the results of the 1st Phase and assure full implementation of all project components and efficient achievement of set targets for sustainable management of waters and protection of ecosystems in the Black Sea.

6.5 System Boundary

196. For the purpose of this project, the area of GEF interventions is limited to the marine and coastal zone of the Black Sea, as regards the international water boundaries, and beyond this, the natural resources of the Black Sea countries, as regards the natural resources management and

biodiversity conservation objectives.

197. The project will inevitably result in a large number of domestic and regional impacts and benefits and attention has been paid to include these within the system boundary. The participating countries include Bulgaria, Georgia, Romania, The Russian Federation, Turkey, and Ukraine.

198. Over the long-term, a variety of domestic benefits would be gained through the implementation of the proposed project. The most valuable domestic benefits to be gained from the project are associated with substantially strengthened institutional and human capacity in pollution control and water quality assessment, increased technical knowledge and public awareness of Black Sea environmental issues and transboundary co-operation, and improved national capacities in environmental legislation and enforcement as well as in natural resources management.

199. Bilateral and multilateral programmes focused on domestic improvements in water management and pollution control have been included within the baseline in order to clearly distinguish between actions most likely to result in domestic benefits (baseline bilateral projects) and those that will mainly result in regional and global ones (the present project).

6.6 Calculation of Baseline and Incremental Costs

200. The description and calculation of baseline and incremental costs can adequately be done for technical investment projects designed for the protection and management of international waters, respectively the conservation of biodiversity. In these cases it is possible to determine for each expected Output and for each activity the respective baseline and incremental costs and analyse the resulting domestic and global benefits.

201. In the case of the BSERP costs are considered to be the GEF project cost of $6,000,000. The special contributions of the BSC, participating countries and institutions for implementing the BSSAP, which amount to 1,227,632 USD (Appendix E), as well as a Tacis Project, which amounts to $4,104,474 are considered as “incremental” co-financing costs. The total amount of the incremental co-financing costs is $5,332,106. The BSERP Project, with a total financial support of $6,000,000 (Tranche 2) will reinforce - in addition to the investments described under “baseline” cost - the capacities of the BSC and the participating countries to address adequately the problem of nutrient reduction. “Incremental” costs are specially defined to strengthen transboundary cooperation under the Black Sea Strategic Action Plan for the development of national policies and legislation and the identification of jointly implemented priority actions for nutrient reduction leading to the restoration of the Black Sea ecosystems.

202. For the definition of "baseline" costs, with a total of 828.37 million USD, only indirectly related with project activities, can be identified in relation to non-structural projects for the development of policies, legislation, institutional mechanisms and enforcement systems, which are financed in the frame of technical assistance projects from bilateral and international sources:

- Bilateral Assistance and EU programme for CIS countries – GEF, WB, Tacis/EuropeAid, Dutch Government, etc 17,716,802 USD;

203. Detailed presentation of the incremental costs is included in Appendix F, page 135.

7 RISKS AND PRIOR OBLIGATIONS

7.1 Risks and steps taken to minimise them

204. Risks identified for the implementation of the project are mainly linked to the political and economic restructuring in all of the beneficiary countries. In addition a number of operational risks associated with delays in coordinating arrangements may emerge.

205. The last 10 years have witnessed frequent changes in the Governments throughout the region, resulting with relatively varied policy priorities, and a considerable turnover of senior government officials. Although there have been important advances in development and implementation of environmental policies, such changes have had negative impacts on the regional initiatives for environmental protection from time to time. These effects have ranged from weakening of the willingness of one or more countries to cooperate, which unfortunately caused a loss of momentum in some regional initiatives; to intervals in the decision-making process/a slow pace in endorsement/enforcement of policy decisions, and to delays in the delivery of some of the project outputs. In addition, the slow pace in reforming other sectoral policies - municipalities, democratisation, investments, etc.- has negative effects on effective and timely implementation of environmental projects. Although not widespread, geo-political conflicts in some parts of the region have also hampered enforcement of environmental protection measures. However it is believed that factors such as: the establishment of the Permanent Secretariat, enactment of the Commission budget, the EU accession prospects which will be supported by a Communication on the Black Sea and the Danube River Basin, and a number of additional regional/sub-regional projects/initiatives are all supportive of an increased level of cooperation and mutual accountability in the region which will reduce the political risks associated with the implementation of the Black Sea Ecosystem Recovery Project.

206. In all of the countries the state of the economy continues to be a concern. The state of the economy and rate of transition in the market conditions varies considerably between countries. Financing constraints exist in every country in the region. Investment priorities are frequently shifted towards areas with marginal or even negative environmental benefits in weak economies, while macro-economic balances do not allow for additional borrowing in some others where a considerable number of pollution control investments are already going on. Under these conditions, the risks in meeting the baseline costs of nutrient reduction in the Black Sea region will continue to prevail. However, it has been noted that some of the risks associated with the economical conditions are reduced/eliminated to a great extent by a careful design of loan agreements, deployment of additional efforts to increase the capacity of municipalities to

manage and repay such loans, a speedy privatization process taking due consideration of environmental cost/benefits, and establishing public-private partnerships.

Table 18 Assumptions, Risks, and Measures

Assumptions	Risks	Degree	Planned measure
1. Long-term development Objective:			
• Financial and human capacity resources are directed from national and local Government to support the project activities.	• Low priority for environmental issues due to unfavourable conditions in countries with transitional economies and political instability in the region.	Medium	• Close inter-linkages between the Commission and the Project mechanisms; • Continuous dialogue with other political actors and the donor community with a view to ensure that regional responsibilities are also properly addressed in donor assistance programmes; • Promoting cooperation and accountability through the BSC, the Steering Committee and other mechanisms.
• Local authorities are willing to cooperate in project implementation where this is required; governments facilitate participation of local administrations in project activities	• Efficient working linkages /networking can not be established.	Medium	• Facilitation of networking through the BSC, BSEC and other platforms; • Contacts with local administrations involved in implementation of projects under Partnership Investment Facility; supported by other donors participating in the BSEP-Steering Committee and Local Agenda 21 initiatives.
2. Overall Objectives:			
Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention			
• All Contracting Parties provide financial contributions in time and support national and regional bodies cooperating under the BSC.	• Insufficient budgetary means of the BSC Secretariat through delayed or omitted payment of contributions and insufficient support from Contracting Parties to the work of national and regional bodies of the BSC.	Medium	• Consideration at Tripartite Review Meeting;
• The countries in the basin are willing to establish a permanent mechanism for co-operation	• The effective implementation of the BSC-ICPDR (Danube) MOU is achieved • Emergence of other river basin commissions (e.g. Dnipro) in the Black Sea Basin is delayed	Low	• Facilitation of high level consultations with the participation of major policy actors (respective constituencies in GEF Council, EC); • Facilitation of basin-wide high level policy consultations, including within GEF Council.
• Adaptation of project objectives and activities to national conditions;	• Inadequate adaptation of project objectives and activities to national conditions;	Medium	• Coordination/task sharing by the PIU and the Permanent Secretariat.

Assumptions	Risks	Degree	Planned measure
• Adequate performance of international and national consultants;	• Inadequate performance of sub-contractors and/or international consultants; • Inadequate professional performance of national consultants proposed by Government and/or no access to information;	Low	• Countries provide premises and logistical support to the Project Support Structure; • National consultants proposed by Government.
• Sufficient access to information through national Governments.	• Bureaucratic obstacles in information exchange at the regional level; • Governments may rely on informal or not specialized coordinating mechanisms.	Low	• Information flow from each country managed by national person nominated by the BS Commissioner; • Collaborate with the Secretariat to establish the legal and technical basis of information/data exchange.
Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones.			
• LBA Protocol recognized as a useful political tool; • Political commitment existing and financial means sufficient to revise and apply legislation; • Cooperation of all Governments (and private sector) in providing necessary information and data is assured.	• Lack of political will to enforce the LBA Protocol to the Bucharest Convention; Insufficient engagement (financial and human capacity constraints) from national and local Government to support activities; insufficient access to information. • Slow decision making and ratification process	Medium	• A careful assessment of national/regional legislation and enforcement mechanisms, and design of a feasible and phased approach for the region (e.g. environmental quality objectives); • Harmonization with EU policies that are imperative for the 3 accession countries; • Cooperation with the relevant bodies of legislators' platforms such as PABSEC. • Widely acknowledging local communities on BS-SAP and the Aarhus Convention in project activities; • Promoting exchange of information within and between thematic working groups; • Publicly accessible programme materials in all Black Sea languages, including through the web.
• Sufficient national support for implementation of pilot projects for ICZM provided; All Black Sea countries will cooperate in adopting and introducing concept of ICZM.	• Insufficient support from Government and local administration for implementation of Pilot Projects on ICZM, wetlands restoration and protection of marine ecosystems; Insufficient interest and support from private stakeholders and NGOs to cooperate in the implementation of Pilot Projects.	Medium	• Written confirmation of the willingness of the respective sectors to develop and implement measures within their own areas of responsibility; • Thematic networks established and workshops (national / international) held;

Assumptions	Risks	Degree	Planned measure
• Preparedness of Government, local administration and private sector to revise sectoral policies and to work together to introduce BAP and BAT.	• Taking into account special know-how, financial and marketing considerations farmers might not adopt BAP without subsidies; • Limited financial resources and insufficient technological know how will not allow municipalities to introduce BAT for urban wastewater collection and treatment.	Medium	• Inter-governmental committees established; • Technical publications made; training programmes held; • Web-based dialogue promoted and materials disseminated; • Coordination with other regional/global sectoral cooperation initiatives; • Gathering of technical information and data to facilitate the negotiation process; • Facilitating interim measures such as fisheries free zones to allow for restoration of macrophyte habitats and recovery of nursery grounds, measures to limit fishing, establishment of Marine Protected Areas; • Enhanced coordination with other regional seas programmes and global platforms (e.g. UNEP-FAO);
• National negotiation process successful to develop legally binding document on Fisheries; • BSC reaches agreement in time on Annex for the establishment of fisheries-free zones and marine protected areas.	• Absence of technical data and information needed for policy planning; • Proposed policies are not compatible with ecosystem based fisheries; • Missing control and competition between fishermen leading to violation of fishing regulations and of fisheries-free zones.	Medium	
• Willingness to share data/information freely, through the PIU information base.	• Social, legislative and institutional bottlenecks hindering full stakeholder participation	Low	• Specific mechanisms for the participation of all stakeholders; • Support to networking of stakeholders; • Enhanced collaboration with other regional sectoral initiatives/ programmes and with RECs; • Dissemination of project outputs to specific target groups; • Targeted training-education programmes and awareness raising campaigns.

Assumptions	Risks	Degree	Planned measure
Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems			
• Cooperation of Governments, in providing necessary information and data; required information is accessible for international and national experts deployed by the project.	• Necessary information and data might not be obtained from central an local Governments and public and private banking sector; • Bureaucratic obstacles in information exchange at the regional level.	Low	• Raising issues concerning the right to free circulation of information on project outputs and issues in formal platforms such as the BSC; • Collaborate with the Secretariat to establish the legal and technical basis of information/data exchange • Facilitation of networking through the BSC, BSEC, and other platforms.
• Cooperation of risk friendly financing institutions and donors to support implementation of investment projects.	• Uncertain legal conditions and administrative stumbling block discourage foreign investors to enter private-public partnerships.	Medium	• Opportunities for public-private partnerships and donor assistance in implementing demonstration projects are sought.
• Commitment of IFIs incl. GEF-WB and bilateral donors to support the implementations of investment projects with grants and soft loans.	• Priorities for financing change.	Low	• Close collaboration with projects funded under Partnership Investment Facility; • Contacts with local administrations involved in implementation of projects under Partnership Investment Facility; supported by other donors participating in the BSEP-JPMG and Local Agenda 21 initiatives.
Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention			
• Timely supply of reliable data from all national monitoring stations.	• National monitoring institutions may lack necessary financial means and equipment for sampling and laboratory work and certain national monitoring institutions may not supply reliable data in time.	High	• Collaborate with the Secretariat to establish the legal and technical basis of information/data exchange.
• A regional monitoring and assessment network and a data exchange system is available and functioning; countries are willing to participate in relevant project activities.	• BSC Advisory Group not properly functioning/sustainability is under risk.	Medium	• Support provided directly to the project via national project office staff; • Project assistance for the pilot environmental status monitoring programme will be made on a formal basis so as to ensure delivery of output/data by each beneficiary country.

Assumptions	Risks	Degree	Planned measure
• Scientific and technical capacity available at the region will be used to the maximum extent, outside expertise will be channelled in the project where neede d	• Required level of scientific expertise can not be guaranteed	Low	• Close coordination with other ongoing scientific institutions/ programmes • A further two surveys are planned and will conducted on the basis of targeted research as agreed by the International Study Group responsible for marine research in the BSERP;
• Support from all Black Sea countries to establish national information units linked to the Black Sea Information System;	• Governments may not provide in time required scientific data and other information for production of regional Black Sea maps and information for GIS, resulting in the Black Sea Contracting Parties not providing the information in time and quality as needed to compile the Annual status report	Low	• Collaborate with the Secretariat to establish the legal and technical basis of information/data exchange • Support provided directly to the project via national project office staff;
Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raising and implementation of community actions (Small Grants Programme)			
• NGOs in the region have been involved in capacity building exercises during the past 10 years and have capacity for the successful execution of Small Grants;	• Insufficient technical competence of NGOs to reach expected results; conflicts arise among the NGOs/NGO groupings competing for projects funded by donors	Low	• Facilitation of dialogue among the NGOs; • Facilitation of a continuous communication between the PIU/Secretariat and the NGO community in the region.
• Continued/enhanced willingness of NGOs to participate in project implementation	• NGOs priorities do not match with project priorities	Low	• Ensuring involvement of grassroots organisations and local communities through facilitation of networking between them; • Continuous flow of information /supporting materials from the PIU.
• Existence of independently funded regional network(s) of NGOs acting autonomously	• NGOs/NGO networks become dependent on donors' funding and can not sustain themselves	Medium	• Liaise with donors, international NGOs and the RECS for assisting the NGO community in the region in capacity building and fund raising.
• Stakeholder awareness of the purpose of the BSC and related bodies is increased within the region	• Cooperation between Government and NGOs missing or not productive, resulting in a weak or non existing Government response to translate messages in national languages and to participate in awareness raising campaigns;	High	• Facilitation of collaborative arrangements between NGOs and Government; • Facilitation of donors' support to project related NGO activities.

207. The last decade of regional environmental cooperation contains a number of failures in sustaining the technical institutions and coordination mechanisms, which resulted in a lower level of attainment of common objectives. For example, the 6 years delay in establishing the regional coordinating mechanism envisaged in the Bucharest Convention has hindered the proper follow-up of the commitments made in the BSSAP. Inability to sustain the regional activity centres (for example, reduced budgets for activities, inability to pay salaries for the staff) provided by the hosting Governments as an in-kind contribution has delayed the delivery of project outputs. Although such risks still remain, regional cooperation has recently gained a new momentum with the establishment of the Permanent Secretariat of the BSC, and its budget becoming operational- with provision to support the Regional Activity Centres. The EU accession process which involves Bulgaria and Romania; and programmes such as TACIS/EuropeAid to support the environmental policies and pre-investment studies are other factors which ultimately are instrumental in reducing the operational risks associated with implementation of the current project.

208. Risks which might have a specific impact on the implementation of activities and/or delivery of outputs, their likelihood and measures proposed to minimize them are listed in Table 18.

7.2 Prior obligations and prerequisites

209. Each of the beneficiary Governments are eligible for GEF funding, have participated in the consultations for project preparation, and are committed to actively participate in the implementation of its second phase. They have designated a senior official as the GEF Focal Point as well as a National Focal Point exclusively responsible for ensuring the Government's participation in the current project.

210. The Black Sea Commission has also endorsed the Project and agreed to render its policy guidance throughout its duration. The BSC agreed to support the project implementation by integrating the project objectives and activities of its own work-programme, budget and regional coordination mechanisms. The Commission has adopted its budget and work-programme for the implementation of the second phase which will become operational by July 2004, and an indicative budget and work-programme for 2004 to 2007 is provided in Appendix E. The BSC continues to provide for the joint use of its premises with the PIU Appendix C (the Headquarters Agreement).

211. There are no further prior obligations or prerequisites to be fulfilled prior to UNDP approval of the project.

8 INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION ARRANGEMENTS

8.1 Institutional Arrangements

212. In close collaboration with the BSC, the project implementation will be coordinated through the PIU with UNOPS as the Executing Agency on behalf of the recipient countries and the UNDP. The Project Co-ordinator and his team under the guidance of BSC, and through support to the Permanent Secretariat, will have the mandate to organise and coordinate the planning process and implementation activities in line with the project document, and to ensure under the UNOPS, proper management of GEF project funds.

213. UNOPS, as the Executing Agency for the project, will coordinate the recruitment of the PIU Coordinator and a core staff of specialists in accordance with the funding available in the project budget, in close consultation with the beneficiary countries and the Black Sea Commission.

8.1.1 Strategic Partnership

214. The GEF Black Sea/Danube Basin Strategic Partnership shall provide assistance to the BSC and ICPDR to reinforce their activities in terms of policy/legislative reforms and enforcement of environmental regulations (with particular attention to the reduction of nutrients and toxic substances). The regional projects, individually and jointly, will facilitate a coherent approach for policy and legislative measures to be introduced by the participating countries at the national, regional and wider basin levels. The BSERP and DRP regional projects and the World Bank Nutrient Investment Facility shall cross-fertilise each other through *inter alia*, demonstrating the efficiency and environmental effectiveness of laws and policies to be introduced by the regional projects in investment projects implemented under the Nutrient Investment Facility. This will enhance their replicability; elaborating and implementing the most suitable and feasible mix of management instruments, including the economic instruments; highlighting the significance of certain interventions -investments- in terms of environmental-economic costs and benefits etc.

8.1.2 Institutional Structure of the project

215. The Institutional Structure for the implementation of the project will comprise of the following main components:

- Management of the Project, the Black Sea Commission and the Project Steering Committee;
- The Project Implementation Unit (PIU);
- Support structure in each of the Black Sea countries.

Project Management

Black Sea Commission

216. The Black Sea Commission has been established to oversee the international, regional and national activities related to the Black Sea environment. Participation of the project team in the annual meetings of the Black Sea Commission, started in Phase I, will continue in Phase II. Regular reporting of the Project to the BSC provides for a timely account of the needs of the Black Sea Commission in project related activities. Major decisions of the project also require adoption by the BSC.

Steering Committee

217. Another management arrangement within the project implementation is the operation of the project Steering Committee. The project Steering Committee, which was set up in Phase I, will continue operation to review and adopt the work-plans for the project. The CTA will liaise with the National Coordinators, the Black Sea Commissioners, representatives from the donor organisation, IFIs and NGO representatives to prepare a draft updated work-plan which shall be submitted to the Steering Committee for its adoption at least one month before its meeting. The CTA will be responsible for the conduct of project activities in line with the revised work-plan and the budget. The Annual Project Report (APR) to be prepared by the CTA will include detailed information on the implementation of the Workplan, *inter alia*, achievement of project objectives and delivery of project Outputs in accordance with the Workplan.

The Project Implementation Unit (PIU)

218. The PIU will provide technical support to the Permanent Secretariat for the attainment of the objectives defined in the current project document, in particular for:

- establishing basin-wide consultative groups;
- establishment and functioning of national inter-ministerial bodies;
- Reinforcing the legal background on the Protocol to the Bucharest Convention for LBA, promoting implementation;
- Facilitating technical support to the Commissions' Advisory Groups and Activity Centres for the tasks specified in this project document;
- Supporting information transfer and regularly updating existing information on the Black Sea;
- Diffusion of project Outputs through newsletters, posters, technical reports, public information bulletins;
- Management of the Small Grants Programme;
- Developing/updating/maintaining the existing BSEP website, etc.

219. The GEF-PIU will operate as a semi-autonomous unit within the BSEP. It will be hosted by the Black Sea Commission and share the facilities of the Permanent Secretariat of the Commission provided by the Government of Turkey. The Commission and the Government will reaffirm their consent for the use of the premises of the Commission by the GEF-PIU through exchange of letters.

220. The status of international/local staff hired for project implementation through the UNOPS or the UN Country Office shall correspond to that of UN Project Personnel, following the grading applied throughout the UN System (ICSC grading) and the local staff or temporary staff grading where applicable. They shall follow the rules and regulations applicable to UN Project Staff and enjoy the privileges and immunities granted to such staff by the Government of the Republic of Turkey and by the Governments of the region.

221. The proposed initial core staff (full terms of reference given as Appendix B) for the fulfilment of the tasks specified above shall consist of the following:

- Programme Coordinator (CTA)
- Monitoring and Evaluation and Information Specialist/Deputy Project Manager
- Eutrophication/Marine Pollution Specialist
- Regional Support Officer for Harmonisation with the EU Water Policies

Institutional Set Up in the countries

222. Experience of the project implementation in Phase I proved that the arrangements described above are not fully sufficient for a day-to-day cooperation with the beneficiary countries. According to the decision of the Project Steering Committee (Sept 2003) it was recommended to establish support offices, which would provide an efficacious mechanism to support the project activities in the countries. The six Black Sea Commissioners have agrees to provide premises for the project offices as an in-kind contribution. Country coordinating experts have been nominated by the Black Sea Commissioners/National Coordinators and recently employed by the project until the end of the Phase I (April 04). The structure of the proposed institutional set up is presented in Figure 1. Corresponding funds have been allocated in the budget for Phase II (see Table 26, Budget Line 1701).

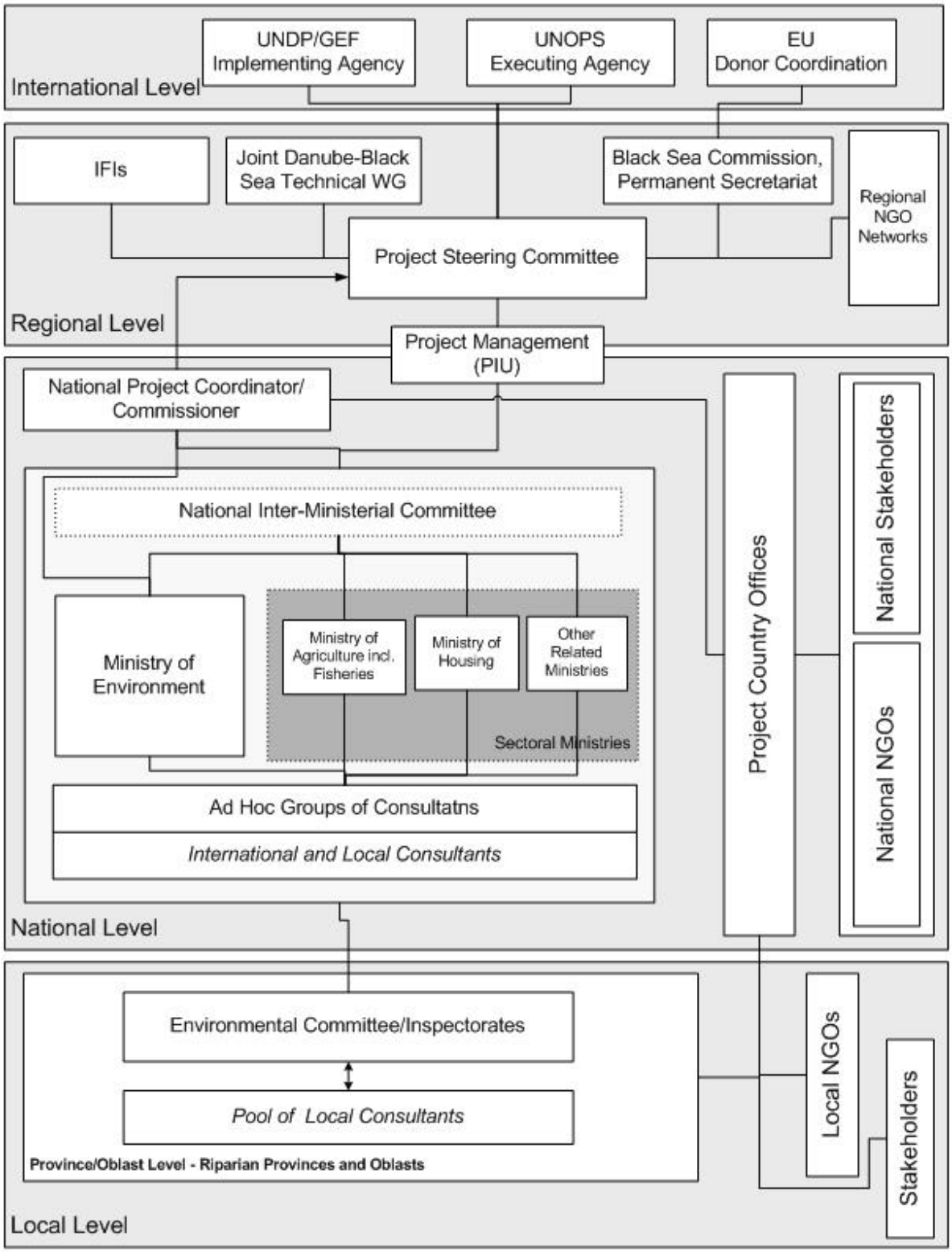
223. The main responsibilities of the coordinating experts will be:

- To liaise directly with the sectoral ministries. The PIU will contract national sectoral experts on an *ad-hoc* basis according to the developed work programme;
- To facilitate day-to-day communication between the Project (PIU) and the stakeholders in a corresponding country,
- To coordinate homogeneous implementation of the project activities at the local level;

- To report to the Representative of their Countries in the Black Sea Commission on activities of the project in the country;
- To instruct specialists to report to them with a pre-determined time-frame concerning specific studies/task forces;
- To support international consultants deployed by the project in the country;
- To coordinate collection of sectoral information at the national and local levels;
- To provide unified reporting in predefined formats from the country;
- To ensure needed quality and reliability of data and information provided by the country.

224. As a trial exercise, the coordinating experts have been contracted by the project for the period Dec 2003 – April 2004. The efficiency of such a set up will be assessed closer to the end of Phase I (April 2004), however, it is believed that such a tool will provide for an effective implementation of the project activities on a national and sub-country levels.

Figure 1 Implementation Chart for the Project Implementation.



9 PROJECT MONITORING AND EVALUATION

225. The project will be subject to monitoring and evaluation through the following mechanisms:

- ***Steering Committee:*** A joint review by the representatives of Governments, GEF Implementing Agencies and observers such as, donors, NGOs, and other stakeholders. The Steering Committee will meet regularly twice a year. Ad hoc Meetings can also be organised upon the request of the members of the Committee, the CTA or the IAs provided that budgetary resources are available. Details on the composition and tasks of SC are described in paragraphs 142-144 above.

- ***Tripartite Review****:* In line with UNDP procedures the project will be subject to Tripartite Review (TPR) once every twelve months. The CTA will prepare a draft Annual Project Report (APR) and formulate recommendations for adjustment of strategies and activities where necessary. The APR shall be prepared at least two months in advance of the TPR to allow review by UNDP and UNDP-GEF prior to the meeting. The TPR will review and adopt the APR as appropriate.

- ***GEF Project Implementation Review:*** In line with GEF procedures the project will be subject to annual Project Implementation Review (PIR). The CTA will prepare a draft PIR report and formulate recommendations for adjustment of strategies and activities where necessary.

- ***External Evaluation:*** During the last quarter of its implementation period, an external team of specialists selected by UNDP-GEF will evaluate the Project with a view to assess the processes employed, Outputs produced and their impacts, and lessons learned.

- ***Quarterly Reporting:*** The PIU will be providing a summary report on progress of the project implementation to the Steering Committee members. The report will also reflect the progress in each of the riparian countries, as provided by the CTLs. Quarterly repots for the last quarters of each year will be included in the Annual Programme Reports.

226. Timing of the monitoring and evaluation events are presented in

Table 19 below. The process indicators have been considered important at the stage of the project design and development; therefore, mainly the process indicators were included in the Project Document and the Executive Summary. On the other hand, the state and stress reduction indicators are addressed to a needed extent in the project activities. The whole set of indicators being developed in both GEF (process, state, state reduction) and DPSIR structure are presented in a separate report. It should be mentioned; however, that the presented set of indicators has not been finalised and properly discussed with the parties involved, and can not be considered as final. The recent developments in EEA and EC have to be also taken into account. A summary of a report, which reflects the development of P, SR, and ES indicators are included as a separate annex to both ExecSumm (Annex G of the ExecSumm) and ProDoc (Appendix T)

Table 19 Monitoring and Evaluation Scheme

Activity / Report	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
Inception Report with Project Implementation Plan	√											
Quarterly Progress Reports to SC	√	√	√		√	√	√		√	√	√	
Annual Programme Report				√*				√*				√*
Tripartite Review and Report				√				√				
Project Implementation Review				√*				√*				√
Mid-term Evaluation	√**											
Final Evaluation												√
Terminal Report												√
Audit				√				√				√

* the APR and the PIR have been combined into 1 report.
** the project consists of 2 phases. Therefore the Mid-term review should take place at the beginning of Phase 2.

10 LEGAL CONTEXT

227. UNDP is implementing the project in consultation with the BSC. The Governments of all eligible participating countries have taken all preparatory measures for government in-kind contribution and have designated senior officials as GEF Focal Points. All contracting parties to the BSC have been actively supporting the implementation of the project during Phase 1. The Commissioners of the Contracting Parties to the Bucharest Convention are leading the process of project implementation at the national level and will continue to do so during Phase 2.

228. At the regional level, the Permanent Secretariat of the BSC will continue to liaise with project staff to ensure efficient coordination of project implementation. The Project Steering Committee (composed of the BSC, UNDP and UNOPS representatives) has been meeting twice a year to provide guidance to project implementation and will continue to do so during phase 2 implementation.

229. There are no further prerequisites or obligations to be fulfilled prior to UNDP approval of Phase 2 of the project. Implementation arrangements between UNOPS as the executing agency and the Contracting parties (through the PIU) is functioning very well.

230. The following types of revisions may be made to this project document with the signature of the UNDP only, provided the organization is assured that the other signatories of the project document have no objections to the proposed changes:

- Revision in, or addition of, any of the annexes to the project document.
- Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation.
- Mandatory annual revisions, which rephrase the delivery of agreed, project inputs or increased expert or other costs due to inflation or taking into account agency expenditures flexibility.

11 WORKPLAN

11.1 Project Management Sheets

231. For each Objective and related activities and outputs a Project Management Sheet (PMS) has been prepared to present the implementation steps and the timeframe for Phase 2 of the Project, indicating the coherence and complementarities of activities and expected results in the two phases of the Project. Further, implementation arrangements are indicated to demonstrate the involvement of the corresponding parties and other links of cooperation as necessary prerequisites for efficient project implementation.

232. The Project Management Sheets are the base for the development of the Work Programme/ Project Implementation Plan which have been developed and will be elaborated on at the beginning of Phase 2 of the project (an Inception Phase of Phase 2 of the project). Taking into account the activities and expected outputs described in the PMS, Project Components have been developed within the implementation of the first phase of the project, regrouping one or more actives to constitute a coherent and integrated implementation approach. The Project Components have facilitated establishing of subcontracts which will further continue in the second phase.

233. Other activities and related outputs described in the PMS will be carried out by international and national consultant under the direct guidance and supervision of the Project Coordinator. Sub-contractors and consultants need to closely cooperate with the BSC and its AGs to respond to the specific requirements in implementing the Danube River Protection Convention and in responding to principles of the GEF international waters.

234. The Project Management Sheets (Appendix J) represent a summary of:

1. Activities of the project in Phase 2
2. A concise description of status of the activities at the end of Phase 1
3. The major implementation steps for each of the activities in Phase 2
4. Specific outputs of each activity in Phase 2 of the Project
5. Implementation arrangements, which include the main key parties to be involved in the implementation of the activities
6. Indicative timeframe for the implementation of each of activities.

11.2 Implementation Schedule

235. The Project Implementation Schedule at the end of this chapter represents the time frame for the second phase as indicated in the Project Management Sheets in a graphical form (Appendix K on page 227).

12 PROJECT BUDGET AND FINANCING

12.1 Budget description

236. The total budget foreseen of the Black Sea Ecosystems Recovery Project – phase 2, is 6,000,000 USD. The funds allocation with respect to the project components is in Table 21 of this document, and a detailed breakdown per each individual activity/Output/objectiv – in Appendix I.

12.1.1 Project Personnel

237. The Core Project Team will consist of[10]:

- The Chief Technical Advisor (Project Manager);
- The Monitoring and Evaluation and Information Specialist (Deputy Project Manager);
- The Eutrophication/Marine Pollution Specialist;
- The Regional Support Officer for Harmonisation with the EU Water Policies (Support and Liaison Officer),
- and five support staff.

238. International Experts and National Professional Project Personnel will work under supervision of the Project Manager.

Table 20 Estimated Costs of the Project Personnel and Other Related Costs

Project Personnel[11]	Person/ Month	Budget	% of Budget for Project Personnel	% of Total Project Budget
International Project Staff / Experts	120	806,000	50%	14.02%
Administrative Support Staff	144	334,800	21%	5.82%
Public Relation Officer	36	90,000	6%	1.57%
International Consultants	4	80,000	5%	1.39%
Coordinating Experts in Each Country	324	162,000	10%	2.82%
Duty Travel		100,000	6%	1.74%
Mission Costs		40,000	2%	0.70%
	Total	**1,612,800**	**100%**	**28.06%**

[10] ToR for the International Project Personnel are presented in Appendix B.

[11] Costs of the Project Personnel include international staff, administrative and support staff (including Public Relation Officer), travelling, international consultants to support the PIU in general management and evaluation of the project results, coordinating experts in each of the Black Sea countries, duty travel, and mission costs (UNDP/UNOPS).

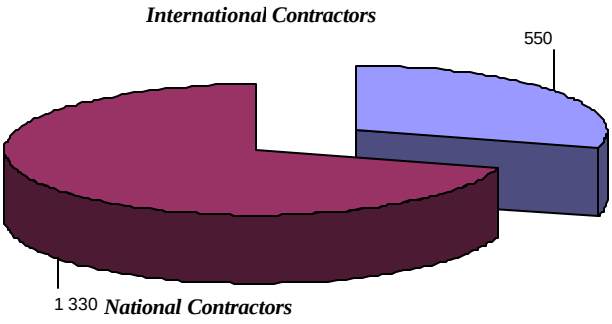
239. The funds for duty travel are foreseen for the project staff to travel within the region to attend meeting, workshops and to participate in international for a related to the project activities. Mission Costs (Official Travel) are to finance travel of UNDP/GEF and UNOPS staff to attend key meetings in the region and participate in evaluation meetings during the project.

12.1.2 Subcontracts

240. Significant part of work for the project will be carried out by specialised international and national subcontractors.

Figure 2 International and Local Sub-Contract

Foreseen in Phase II of the BSERP, ths. US$



241. Amount foreseen for sub-contracting of all international and national organisations/ institutes/ companies total US$ 1,880,000 (34% of the total budget without support costs, UNOPS – 8 %).

242. Comparison of international and national sub-contracts[12] are presented in Figure 2.

243. The list of the selected Project Components/Work Packages, which are foreseen to be subcontracted, is presented in Table 21. In Table 21 not only labour costs are presented, but also all related spendings.

12.1.3 Fellowships and Training

244. During the period July 2004 - July 2007 a number of workshops/training events/seminars are foreseen. The budget covers expenditures related to workshop organisation and participation (travel, DSA, accommodation, meeting facilities, stationary, etc). Costs for preparation of documentation (e.g. training materials) are covered under Miscellaneous. Workshop guidance (facilitator, expertise) has to be covered from the corresponding budget lines for international and/or national consultants.

245. The costs of the fellowship and training events are extracted from the budget allocated for the activities of Phase II of the project (presented in Table 21) and amount to US$ 433,000. The indicative costs of the individual fellowship and training events are presented in Table 22 below (see page 86).

[12] Only labour costs are included in this chart. Other costs, i.e. procurement of equipment, publications, meetings, etc. are presented separately in the budget.

12.1.4 Equipment

246. The project foresees purchase of equipment and supplies for the running the project office. This includes one light vehicle for the project team. Other equipment is foreseen to reinforce national laboratories, to support national information systems in order to improve the capacities of the Black Sea Commission/Permanent Secretariat and provide for a sound information exchange in the Black Sea region. Detailed allocations in the budget to procure all types of equipment in Phase II of the project are presented in Table 23 (see page 86).

Table 21 List of Project Components for Phase II of the BSERP

	Project Components	Outputs/ Activities	Man Power, USD	Meetings, USD	Travel, USD	Equipment, USD	Publications, USD	Sub-Total, USD	% of Budget for Work Packages	% of Total Project Budget
1	Operational structures and management tools of the Black Sea Commission	1.1	406,600	83 000	21,000			**510 600**	13.9%	9%
2	Protocol for Land-based Activities (LBA) revised and submitted for national negotiation.	2.1	20,000	10,000				**30,000**	0.8%	0%
3	Integrated Coastal Zone Management in line with EU Directives and in testing concept for Best Practices for ICZM	2.2	210,000	10,000	20,000	20,000		**260,000**	7.1%	4%
4	Agricultural sector policy reviewed and concepts of BAP proposed	2.3	110,000	30,000	20,000			**160,000**	4.4%	3%
5	Policies and legislation for application of BAT in the industrial and transport sectors	2.4	120,000	30,000	10,000			**160,000**	4.5%	3%
6	Policies and legal instruments for pollution reduction for the municipal sector	2.5	80,000	30,000	10,000			**120,000**	3.4%	2%
7	A legally binding document on fisheries and proposals for fisheries-free zones	2.6	50,000	20,000	20,000			**90,000**	2.4%	1%
8	Economic analysis for the Black Sea countries	3.1	110,000	30,000	20,000			**170,000**	4.6%	2.83%
9	Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones	3.2	50,000	60,000	20,000			**130,000**	3.5%	2%
10	Black Sea Integrated Monitoring and Assessment Programme (BSIMAP)	4.1.1 - 4.1.6	220,000	30,000	30,000	120,000		**400,000**	11.0%	7%
11	Pilot project for a Black Sea Vessel Traffic Oil Pollution Information System (VTOPIS)	4.1.7	90,000					**90,000**	2.4%	1%

Table 21 List of Project Work Packages/Components for Phase II of the BSERP (continued)

	Project Components	)utputs / .ctivitie s	Man Power, USD	Meeting s, USD	Travel USD	Equipm ent, USD	Publications, USD	Sub-Total, USD	% of Budget for Work Packages	% of Total Project Budget
12	The Black Sea Information System (BSIS) including tools for WWW, GIS, mapping and remote sensing	4.2	90,000	30,000	10,000	60,000		**190,000**	5.3%	3%
13	Two survey cruises in the Black Sea	4.3.1	300,000		30,000	50,000		**380,000**	10.3%	6%
14	Study on inputs of nutrients to the Black Sea by atmospheric deposition	4.3.2	100,000	10,000		40,000		**150,000**	4.1%	2%
15	Rapid assessment methodology for diffuse sources in the Black Sea basin	4.3.3	40,000	10,000				**50,000**	1.4%	1%
16	Study for the use of phosphorus in detergents	4.3.4	30,000		0,000			**30,000**	1.0%	1%
17	Scientific Black Sea Conference (2006)	4.3.5	20,000	40,000	0,000			**60,000**	1.8%	1%
18	NGOs structures and activities	5.1	90,000		0,000		60,000	**160,000**	4.4%	3%
19	Community actions for awareness raising and environmental protection (including Small Grant Programme)	5.2	360,000		0,000			**360,000**	9.9%	6%
20	Public information and awareness for environmental issues	5.3	20,000	0,000	10,000		100,000	**140,000**	3.8%	2%
	Sub-Total, US$		**2,548,600**	**433,000**	**244,000**	**290,000**	**160,000**	**3,675,600**	**100%**	**61.26 %**
	TOTAL, US$	**3,675,600**								

247. The specifications of the equipment will be developed by the Project Manger in cooperation with the Permanent Secretariat of the Black Sea Commission and the Advisory Groups. Purchases will follow the procurement rules of UNOPS.

Table 22 Indicative Costs of Fellowship and Training Events - Phase II of the BSERP, US$

Fellowship and Training	Project Output	Budget	% of Budget for Meetings	% of Total Project Budget
Information Management	4.2	30,000	7%	0.52%
Implementation of Danube-Black Sea MoU	1.1	30,000	7%	0.52%
National Coordination	1.1, 2.1, 3.1	38 000	9%	0.66%
Project Management	1.1	30,000	7%	0.52%
Regional Cooperation	1.1, 2.2, 5.1	10,000	3%	0.26%
Sectoral Meetings/Training	2.2 - 2.6	110,000	27%	2.00%
Donor Conference	3.2	50,000	12%	0.87%
Socio-Economic Analysis	3.1	20,000	5%	0.35%
Investment Development	3.2	10,000	2%	0.17%
Monitoring and Research	4.1, 4.3	40,000	10%	0.78%
Assessment Methodologies	4.1	10,000	2%	0.17%
Scientific Conference	4.3	40,000	9%	0.70%
NGO Training	Part of SGP			
	Total	**433,000**	**100%**	**7.53%**

Table 23 Equipment to be Provided by the Project in Phase II, US$

Type of Equipment	Project Output	Budget	% of Budget for Equipment	% of Total Project Budget
Office equipment for PIU	gpc[13]	30,000	8%	0.52%
Expendable equipment for PIU	gpc	30,000	8%	0.52%
Local Procurement (Vehicle)	gpc	20,000	5%	0.35%
Office equipment for the Black Sea countries	2.2, 4.2	40,000	11%	0.70%
Black Sea Information System (BSIS)	4.2	40,000	11%	0.70%
Monitoring Equipment	4.1, 4.4	210,000	57%	3.65%
	Total	**370,000**	**100%**	**6%**

[13] gpc – General Project Costs.

12.1.5 Miscellaneous

248. The item Miscellaneous covers general costs for operation and maintenance, report printing and publishing (including production of awareness raising materials – project Objective 5).

Table 24 Miscellaneous Costs, US$

Miscellaneous Costs	Project Output	Budget	% of Budget for Equipment	% of Total Project Budget
Operation and maintenance	gpc	167,156	48%	2.91%
Reports Printing and Publishing	gpc	20,000	6%	0.35%
Publications within different activities	all	60,000	17%	1.04%
Production of awareness raising material	5.3	100,000	29%	1.74%
	Total	**347,156**	**100%**	**6%**

12.1.6 Agency Support Costs

249. Of the total project costs 8 percent are made available for Project Execution (UNOPS – Executing Agency).

Table 25 Agency Support Costs, US$

Agency Support Costs	Budget, US$
Project Support Costs (8%)	444,444

12.2 Detailed Breakdown of Budget Implementation Per Year

Table 26 Detailed Breakdown of the Phase II Budget per Year

B/L	Output	Description	Man-months	Total	2004	2005	2006	2007
					6 months	12 months	12 months	6 months
10				***$2,625,400***	***$584,900***	***$893,800***	***$798,300***	***$331,400***
110	**International Professional Project Staff**							
1101	1.2	Project Coordinator-P5	36	**300,000**	50,000	100,000	100,000	50,000
1102	1.2	Monitoring & Evaluation and Information Specialist - L4	36	**219,000**	36,500	73,000	73,000	36,500
1103	1.3	Eutrophication Expert - L3	36	**219,000**	36,500	73,000	73,000	36,500
1104	1.2	Regional Support Officer for Harmonisation with the EU Water Policies - L3	12	**68,000**	34,000	34,000		
		subtotal	*120*	$806,000	$157,000	$280,000	$246,000	$123,000
115	**International Consultants**							
1151	1.1.2	Institutional Expert(s)	1	**63,000**	5,000	26,000	27,000	5,000
1152	2.6	Fisheries Expert(s)	3	**30,000**	4,500	10,500	11,000	4,000
1153	3.2	Investment Development	3	**30,000**	11,000	19,000		
1154	4.2	Experts on Information Management and Systems (incl. Web, GIS, etc.)	6	**20,000**		6,000	7,000	7,000
1155	4.3.6	Experts on Detergents	1	**20,000**	20,000			
1156	gpc*	General Logistical Support	1	**90,000**	20,000	20,000	30,000	20,000
1157	5.1,5.2,5.3	NGO Experts/Environmental Education Specialists	2	**35,000**	26,200	3,300	800	4,700
		subtotal	*32*	$288,000	$86,700	$84,800	$75,800	$40,700
13	**Administrative and Support Staff**							
1301	1.2	Financial Administrator	36	**108,000**	18,000	36,000	36,000	18,000
1302	1.2	Contract Administrator	36	**108,000**	18,000	36,000	36,000	18,000
1303	1.2, 5, gpc	Public Relation Officer	36	**90,000**	15,000	30,000	30,000	15,000
1304	1.2	Secretary	36	**54,000**	9,000	18,000	18,000	9,000
1305	1.2	Driver	36	**64,800**	10,800	21,600	21,600	10,800
		subtotal	*180*	$424,800	$70,800	$141,600	$141,600	$70,800
15	**Duty Travel**							
1501	1.2	PIU Travel		**100,000**	20,000	30,000	30,000	20,000
1502	All activities	Activity Related Travel		**261,000**	55,000	80,000	80,000	29,000
1601	1.2	UNDP/UNOPS		**24,000**	6,000	6,000	6,000	6,000
1602	1.2	Project Evaluation		**16,000**	4,000	4,000	4,000	4,000
		subtotal		$401,000	$85,000	$120,000	$120,000	$59,000
17	**National Professional Project Personnel**							
1701	gpc	Coordinating Experts in Each Country	108	**162,000**	27,000	54,000	54,000	27,000
1702	1.2	Institutional Expert(s)	1	**43,600**	900	20,900	20,900	900
1703	2.2	ICZM Specialists	108	**130,000**	50,000	37,000	38,000	5,000
1704	2.3	Agricultural Sector and Policy Experts	50	**60,000**	12,000	36,000	12,000	0
1705	2.4	Industrial/Municipal Waste Water Treatment Experts	50	**60,000**	10,000	20,000	30,000	
1706	2.5	Policy and Legal Instruments Experts	42	**50,000**	10,000	25,000	15,000	
1707	2.6	Fisheries Expert(s)	17	**20,000**	3,000	9,000	7,000	1,000
1708	3.1	Socio-Economic Analysis	38	**45,000**	21,000	12,000	12,000	
1709	3.2	Investment Development	17	**20,000**	8,500	11,500		
1710	4.1	Tranboundary Monitoring Systems and Indicators	33	**40,000**	14,000	26,000		
1711	4.2	Experts on Information Management and Systems (incl. Web, GIS, etc.)	38	**45,000**	17,000	12,000	12,000	4,000
1712	4.3	Experts on Detergents	8	**10,000**	10,000			
1713	4.3.5	General Logistical Support for Scientific Conference	8	**10,000**			10,000	
1714	5.3	Environmental Education Specialists	8	**10,000**	2,000	4,000	4,000	
10		*subtotal*	*588*	$705,600	$185,400	$267,400	$214,900	$37,900

B/L	Output	Description	Man-months	Total	2004	2005	2006	2007
					6 months	12 months	12 months	6 months
20	**Subcontracts**			***$1,780,000***	***$484,500***	***$732,000***	***$460,500***	***$53,000***
2101	1.1.3	Renew Trans-boundary Diagnostic Analysis (TDA)		**50,000**		40,000	10,000	
2102	1.1.4	Review and update Black Sea Strategic Action Plan (BSSAP)		**50,000**		20,000	30,000	
2103	1.1.5	Support to the Permanent Secretariat of the BSC		**200,000**	40,000	50,000	70,000	40,000
2104	2.1.1	IAEA UNEP Revised Land Based Protocol	2	**20,000**	20,000			
2105	2.2	ICZM Activities including Pilot Projects	8	**80,000**	30,000	28,000	19,000	3,000
2106	2.3	Agricultural sector policy and BAP	5	**50,000**	12,000	32,000	6,000	
2107	2.4	Policies/Legislation for Application of BAT in Industrial/Transport Sector	6	**60,000**	10,000	20,000	30,000	
2108	2.5	Policies/Legal Instruments for Municipal Pollution Reduction	3	**30,000**	7,500	15,000	7,500	
2109	3.1	Economic Analysis for the Black Sea Countries	7	**70,000**	20,000	27,000	23,000	
2110	4.1	Further Development of BSIMAP incl QA/QC, indicators, and pilot exersices		**180,000**	40,000	80,000	60,000	
2111	4.1.7	Pilot Project on VTOPIS	9	**90,000**	30,000	60,000		
2112	4.2.7	Download and Distribute Satellite Data	3	**30,000**	15,000	15,000		
2113	4.3.1	Two Survey Cruises in Black Sea		**300,000**	200,000	100,000		
2114	4.3.2	Inputs of Nutrients to Black Sea by Atmospheric Deposition		**100,000**	30,000	40,000	30,000	
2115	4.3.3	Rapid Assessment Methodology for Ddiffuse Sources	4	**40,000**	20,000	20,000		
2116	5.1.2	Support to "Umbrella" NGOs	33	**40,000**	10,000	10,000	10,000	10,000
2117	5.1.3	Stakeholder Training in Sustainable Coastal Zone Management	4	**40,000**		40,000		
2118	5.2.3	Small Grant Programme (SGP)		**350,000**		175,000	175,000	
30	**Fellowships, Training and Meetings**			***$433,000***	***$88,500***	***$179,500***	***$128,500***	***$36,500***
3201	4.2	Information Management		**30,000**	2,000	6,000	15,000	7,000
3202	1.1.4	Implementation of Danube-Black Sea MoU		**30,000**	7,000	7,000	8,000	8,000
3203	1.1,2.1,3.1	National Coordination		**38,000**	5,500	17,500	7,500	7,500
3204	1.1.1	Project Management		**30,000**	8,000	6,000	6,000	10,000
3205	1.1,2.2,5.3	Regional Cooperation		**15,000**	4,000	9,000	1,000	1,000
3206	**	Sectoral Meetings/Training		**115,000**	35,000	42,000	35,000	3,000
3207	3.2.5	Donor Conference		**50,000**		50,000		
3208	3.1	Socio-Economic Analysis		**20,000**	4,000	6,000	10,000	
3209	3.2.1	Investment Development		**10,000**	5,000	5,000		
3210	4.1,4.3	Monitoring and Research		**45,000**	18,000	21,000	6,000	
3211	4.1.6	Assessment Methodologies		**10,000**		10,000		
3212	4.3.5	Scientific Conference		**40,000**			40,000	
40	**Equipment**			***$370,000***	***$132,500***	***$142,500***	***$77,500***	***$17,500***
4501	gpc	Office equipment for PIU		**30,000**	10,000	10,000	5,000	5,000
4502	gpc	Expendable equipment for PIU		**30,000**	7,500	7,500	7,500	7,500
4503	gpc	Local Procurement (Vehicle)		**20,000**	20,000			
4504	2.2.5, 4.2.3	Office equipment for the Black Sea countries		**40,000**		20,000	20,000	
4505	4.2.1, 4.2.6	Equipment for the Black Sea Information System (BSIS)		**40,000**	15,000	15,000	5,000	5,000
4506	4.1, 4.3	Monitoring Equipment		**210,000**	80,000	90,000	40,000	
50	**Miscellaneous**			***$347,156***	***$69,646***	***$96,219***	***$126,219***	***$55,073***
5201	gpc	Operation and maintenance	36	**167,156**	37,146	55,719	55,719	18,573
5202	5.1.4	Publications within different activities		**60,000**	15,000	15,000	15,000	15,000
5203	5.3.1,5.3.3	Production of awareness raising material		**100,000**	12,500	22,500	52,500	12,500
5204	gpc	Reports Printing and Publishing		**20,000**	5,000	3,000	3,000	9,000
90		**PROJECT TOTAL**		**5,555,556**	**1,360,046**	**2,044,019**	**1,591,019**	**493,473**
93		**SUPPORT COSTS**						
9301		SUPPORT COST 8%		**444,444**	**108,804**	**163,521**	**127,281**	**39,478**
99		**GRAND TOTAL**		**6,000,000**	**1,468,849**	**2,207,540**	**1,718,300**	**532,951**
	Note:	* - gpc - General Project Components		**100%**	24%	38%	29%	9%

** - 2.2.1, 2.3.1, 2.3.5, 2.4.1, 2.4.6, 2.5.1, 2.5.5, 2.6.1, 2.6.2, 2.6.5.

13 SUSTAINABILITY AND PARTICIPATION

250. The Black Sea Ecosystem Recovery Project (Phases I and II) has to be seen as a logical continuation of the GEF assistance to the Black Sea Environmental Program. The BSERP has established the necessary conditions for the BSC and for the Black Sea riparian countries to assure efficient implementation of policies and measures for pollution reduction and resource management. The proposed Phase 2 of the BSERP can build on a very favourable framework for sustainability and participation already reinforced in Phase I, and on the findings and recommendations of:

- The Declaration on the Protection of the Black Sea (Odessa, 1993) that is basic framework of agreement;
- The BS-SAP 1996 as the agreed-upon policy document of the Black Sea environment protection focusing on policies and strategies for pollution control and resource management;
- The Declaration to the Convention on the Protection of the Black Sea Against Pollution (Sofia, 2002);
- The National Strategic Action Programmes for rehabilitation and protection of the Black Sea;
- Results of the Danube-Black Sea Task Force (DABLAS) Working Group on Project Prioritization "Prioritization of Municipal Investment Projects in the Danube River Basin", revising the lists of national projects of the ICPDR Joint Action Programme and selection of municipal priority projects.

13.1 Institutional capacities and arrangements

251. With its entry into force on the beginning of 1994, the Convention on the Protection of the Black Sea Against Pollution became the overall legal instrument for cooperation and water management in the Black Sea Basin. Since 2000 all bodies of the BSC, the Expert Groups and the BSC Permanent Secretariat have been fully operational. The primary objective of the Black Sea Ecosystem Recovery Project is to support the BSC in order to achieve a well-balanced integrated implementation of the BS-SAP. It is assured that there is a full developed and functioning institutional framework for project performance.

252. Within the Phase I of the BSERP the institutional framework of the BSC and all participating the Black Sea riparian countries have been further reinforced and appropriate arrangements in particular with BSC Expert Groups were developed. As the BSC is

permanently sustained via financial contributions of the member states, the GEF intervention would further support and strengthen the BSC and its Expert Groups to improve technical and management capacities for the implementation of nutrient reduction measures identified in the BS-SAP.

253. The participation of the European Union is assured in the BSERP through the work of the Joint Danube/Black Sea Technical Working Group that has been revitalized during the Phase I of the BSERP.

13.2 Government commitment

254. All the Black Sea riparian countries have actively participated in the frame of the elaboration of the BS-SAP and have provided all necessary information for the preparation of the present Project Document (PDF-Block B activities) and thus demonstrated their interest in and commitment to pollution control, nutrient reduction and sustainable water management. Further, it should be noticed that two Danube countries (Bulgaria and Romania) and Turkey are actually preparing for accession to the European Union and are therefore committed to applying the European water directives and guidelines for pollution reduction with particular attention to the EU Nitrate Directive, the Urban Waste Water Directive and the implementation of the new EU Water Framework Directive. The EU WFD in the Phase1 of the DRP has already provided very good platform for mobilizing all national governments towards participation and coordination of their efforts within ICPDR. The application of elements of WFD will be considered by other three the Black Sea countries (Georgia, Russia and Ukraine) within the Phase II of BSERP.

255. Legal Frame: The Convention on the Protection of the Black Sea Against Pollution is a legally binding instrument, which provides a solid framework and a legal basis for cooperation, including enforcement. The International Commission for the Protection of the Black Sea (BSC) has been established according to the Convention provision (Art. XVII), and has its seat in Istanbul, Turkey. The BSC and its bodies are responsible for the implementation of the Convention.

13.3 Stakeholder participation

256. The development of NGOs and support to "umbrella organisations" for the Black Sea NGOs was an essential contribution of the previous GEF assistance to assure public participation in the planning and plan implementation processes. Small Grants Program successfully conducted within the Phase I of BSERP has facilitated the implementation of community-based projects in the Black Sea riparian countries. It is envisaged within the

Phase II of BSERP to continue implementation of GEF Small Grants Programme for NGOs in the Black Sea riparian countries. Since the BSERP is in the 1st phase providing support for strengthening and reinforcement of NGOs capacities, it is assured that the existing structures of local NGOs and NGOs "umbrella organisations" will play an important role in the implementation of the GEF Black Sea Ecosystem Recovery Project and in the development and application of new policies and regulation to improve water quality and to assure rational use of resources.

14LESSONS LEARNED

14.1 Lessons Learned in Preparing the BSERP

257. Prior to the 1990s, little or no action had been taken to protect the Black Sea. Political differences during the Soviet era, coupled with a lack of general knowledge of the environmental situation resulted in an absence of effective response. Perestroika changed this and by 1992 the Black Sea countries were ready and willing to co-operate. They had just signed the Bucharest Convention. However, they still lacked the policies which would enable necessary measures to protect the sea. Agenda 21 provided a good model for a first Black Sea Ministerial Declaration, the Odessa Declaration. Indeed, the Black Sea was the first region to take up the challenge of Rio. This inspired the GEF and other donors, particularly the European Union, to provide more than US$17 million support to the region to help implement the Odessa Declaration and to formulate the longer-term Black Sea Strategic Action Plan.

258. The Black Sea Environmental Programme (BSEP) was launched in June 1993. The Programme included a number of interventions by the GEF (and other donors), the first of which was entitled 'Project for the Environmental Management of the Black Sea, approved under the GEF Pilot Phase). Its first task was to help create a strong international network of institutions, specialists and other stakeholders. The BSEP established its headquarters in Istanbul with the support of the Government of Turkey. In order to spread the technical responsibilities of the programme throughout the region and to make best use of the excellent specialists in the region, a system of Regional Activity Centres and Working Parties was devised. Each country agreed to sponsor one of its existing institutions as a regional centre for a particular field of expertise. The regional centres in turn organised Working Parties, specialist networks involving institutions from all six Black Sea countries. Using this structure, it was possible to bring together specialists who had sometimes not been able to co-operate previously.

259. The BSEP Working Parties completed a series of background studies that enabled a Transboundary Diagnostic Analysis (TDA) to be finalised in June 1996. On the basis of this comprehensive report senior government officials negotiated the Black Sea Strategic Action Plan (BS-SAP), signed on October 31st at a Ministerial Conference in Istanbul. The consensus on the BS-SAP was very broad. It provides a very modern approach to environmental policy making and agrees on the following key matters:

- That the principle cause for the decline of the Black Sea ecosystem is eutrophication;
- That without full co-operation with riparian countries of the main tributary rivers (Danube and Dnipro) this problem cannot be addressed;
- That the institutional structure of the BSEP should be incorporated into that of the Istanbul Commission for the Bucharest Convention;
- That an adaptive management approach should be adopted for the control of pollution in the Black Sea;
- That biological diversity and fisheries concerns should be part of the future agenda of the Commission;
- That greater stakeholder participation and transparency should be ensured (in line with the provisions of the Aarhus Convention.

260. Following the signature of the BS-SAP, GEF funding was sustained, albeit at a lower level, in order to enable countries to complete National Black Sea Strategic Action Programmes and for the negotiations on the institutionalisation of the Istanbul Commission's Secretariat to be completed. This was a very protracted three-year process as countries struggled to overcome technical and legal issues of establishing the Secretariat. In the meantime however, progress was made in implementing part of the BS-SAP thanks to GEF seed money and considerable support from the European Commission by TACIS or and DG XI (currently DG Environment). The main achievements were:

- Establishment of the *ad-hoc* technical working group with the ICPDR and joint analysis of the problem of eutrophication in the Black Sea, including recommendations for target for nutrient control;
- Continued support to the BSEP Activity Centres and real progress through demonstration projects in the areas of data quality control, oil spill response, coastal zone management, aquaculture and biological diversity;
- Strengthening of the programme for public participation, particularly through the Tacis small grants initiative, largely focussed on actions around Black Sea (as a reminder of commitments to the BS-SAP);
- Publication of the State of Pollution in the Black Sea report and the Black Sea Red Data Book;
- Agreement on a new set of water quality objectives to propose to the BSC as required by the BS-SAP.

261. In April 2000, a breakthrough was finally made in the negotiations for establishing the Commission's Secretariat. The Secretariat became operational in October 2000, following the selection of its senior officials at an extraordinary session of the BSC on September 10-11, 2000. Four countries (Bulgaria, Romania, Turkey and Ukraine) made their financial

contributions to the Commission. In addition, the Republic of Turkey is providing the facilities for the Secretariat, to be shared with the PIU.

262. Key lessons learned in previous PDF-B project activities were determined in the process of preparing the overall Black Sea Ecosystem Recovery Project in 2000-2001. Some important lessons have been learned from a range of GEF and other environmental planning projects. In the frame of this project, the Black Sea countries cooperating under the PDF-B have achieved important results in terms of capacity building and institutional strengthening. The planning process in elaborating the TDA and the BS-SAP, which involved stakeholders from the local governments, scientific institutions and NGOs, had created a high momentum in adopting GEF operational principles for the protection of international waters and ecosystems. Further, the interaction with other organisation, in particular the EU TACIS, the World Bank, the EBRD, etc., and joint actions with the DRP have set new standards for regional cooperation. These positive achievements will be consolidated in implementing the Danube / Black Sea Basin Strategic Partnership.

263. The PDF-B of BSEP indicated how time consuming and difficult it is to set up institutional structures, information networks and to introduce new approaches of planning in countries that are in a continuous process of political and economic transition. Based on this experience, it is recommended that – wherever possible - the newly created institutional settings, networks and methodological tools should be reinforced through the BSERP in close cooperation with DRP. Special emphasis should be put on the maximum utilization of the participatory approach that is now fully understood and accepted by the participating countries.

264. In many transition countries, the policy and legal frame is presently being reviewed and adjusted, focusing in particular on unclear land ownership and uncontrolled resource management (forestry, mining, etc.), which lead to environmental degradation and damage. In many countries, compliance with environmental laws and regulations is not controlled and is consequently very low. This is partially due to structural and organisational weaknesses and more to budgetary limitations. Inter-ministerial coordination is another common and serious problem for project implementation when coordinating structures are missing at national levels. The involvement and cooperation of all relevant governmental bodies, in particular the Ministry of Environment, Ministry of Economy, Ministry of Agriculture, of Foreign Affairs, etc. is essential in the early project preparation phase.

265. Another lesson learned is that project activities conducted by international expert teams without close integration and cooperation with experts from the relevant the Black Sea riparian countries are often not recognized. In the frame of the Black Sea Environmental

Program many project components have failed to be sufficiently coordinated with the BSC and its Expert Groups and thus did not respond to the expressed needs of the beneficiaries. It is therefore recommended that all project components should be carried out in close cooperation with the BSC's expert bodies and that highly qualified national experts/consultants – available in all the Black Sea riparian countries – should be contracted.

14.2 Lessons Learned During Implementation of Phase 1 of the BSERP

266. Some further lessons have been learned based on experience gained in the implementation of Phase 1 of the BSERP to date. The establishment of intensive cooperation with the BSC and its structures (co-executing agency and primary beneficiary) and improving administrative and technical capacities to cooperate enhances the effectiveness of project implementation. The BSC was formed to implement the Convention on Protection of the Black Sea Against Pollution (CPBSAP).

267. By proactively working together with the BSC at various levels, i.e. the Secretariat, the respective BSC Expert Groups and respective National Governments, the GEF project has established good cooperation. The project participates, together with relevant contractors where appropriate, in all Expert Groups Meetings organised by the BSC. In this way the BSERP has a full overview and understanding and can thereby provide the best assistance and input into the further development of the work. Further, these commonly implemented activities serve to improve administrative and technical capacities at the National level based on guidelines and requirements set by the BSC and the BSERP. In this way, the GEF project plays a catalytic role in stimulating the Black Sea riparian countries to meet their commitments to the CPBSAP and BS-SAP. This encourages national governments to develop appropriate structures for regional cooperation that is thereby facilitating the strengthening of good governance in the Black Sea Basin.

268. One of the lessons learned is the benefit of a close link between global environmental objectives and an appropriate legislative framework. Particular attention has been paid to the EU Water Framework Directive (WFD) that represents very comprehensive water legislation. It provides an excellent basis for the implementation of particular activities of the BSERP given commonly shared principles such as a basin-wide holistic approach, ecosystem management etc. By linking project activities within the Phase II closely with the WFD, the BSERP is increasing the ability to meet global environmental objectives in the frame of the project, and is also establishing the basis for the sustainability of project results as well as the mechanisms for ongoing improvements after the life of the project.

269. The BSERP has put a large emphasis on supporting increased public participation in

the Black Sea riparian countries. An important lesson learned is that it is critical to focus on developing appropriate public participation mechanisms and strategies given specific level of activity (regional, national and local.) The BSERP is developing grassroots level (bottoms-up) activities via the Small Grants Programme, as well as is supporting the development of the NGOs "umbrella organisations" which, as a regional network is capable of working at all levels, regional, national or local levels through its constituent members. Also, the BSERP will assist national governments to incorporate public participation in coastal zone management at the regional, national and local levels. In addition to the above-mentioned activities, there are considerations to develop a specific project component to improve access to information for key stakeholders and to enhance their abilities to address priority issues of pollution in the Black Sea riparian countries.

270. For designing the surveys a small group of scientists (Advisory Board) who were well informed on the specific scientific uncertainties preventing a clear understanding of the linkages between the causes and impacts of eutrophication in the Black Sea were nominated by the PIU to identify research topics, expected Outputs, required format for the proposals and the evaluation criteria. Based on this a call for proposals on the scientific work to be undertaken was prepared; and only after this all-scientific groups in the region were invited to take part in the process. The members of the Advisory Board, after reviewing all proposals and selecting the scientific teams which will execute the surveys, took part in the detailed design process for the surveys conducted by the wider study group- although in general they did not take part in the proposals to be implemented. In summary, a cascaded planning approach was taken. As a result it was it was possible to mainstream the original objective of 'reducing management uncertainties' through the cruises against pure 'scientific inquiry' .The pre-set topical issues, scientific quality criteria and the transparent process for evaluation reduced the potential for conflict of interests between the numerous scientific groups. This lesson serves as a good example for the need to clearly differentiate specific roles expected from various partners; for example decision making /implementation role versus scientific advice and taken into consideration while planning specific measures to enhance the efficiency/efficacy of the Advisory Groups and Regional Activity Centres. Second lesson from the same experience is the need for enhanced transparency as a means of reducing possible conflicts.

15 COST-EFFECTIVENESS

271. Taking into account the social and economic development which will take place in the last decade in the Black Sea countries and considering the EU approximation process and the need to adapt environmental standards to international and EU directives for three riparian countries (Bulgaria, Romania and Turkey), it is evident that investments in environmental protection and management of resources are necessary to assure a sustainable development in the countries of the Black Sea Basin.

272. It is to be expected that most the Black Sea riparian countries - mainly those in transition – will in the next five to seven years see their GDP grow at an annual rate of 4-5 %. This economic growth will be the result of economic recovery in transition countries and new investments in industry, agriculture and services. The development and implementation of adequate environmental standards and mechanisms for compliance is, therefore, essential to assure sustainable development in the region.

273. It was calculated (Transboundary Diagnostic Analysis, 1996) that implementation of 49 investment projects in the Black Sea riparian countries which comprise of construction of new facilities, extension, rehabilitation/upgrading of existing structure, in-plant precautions would lead to a very high extent of annual reduction of nitrogen for 61.5% and phosphorus for 79 % in case of point sources in costal countries, and for 23% and 13% respectively from coastal countries to transboundary rivers.

274. Non-point sources of pollution in relation to land use and agricultural activities represent about half of all nutrients, in particular nitrogen, discharged into the Black Sea. It is assumed that through the development and implementation of policies, legislation and mechanism for compliance, nutrient emissions from non-point sources (land use and agriculture) can be considerably reduced. In respect of this assumption, the actual estimations for the five-year project (according to the DRP methodology) show that development and implementation of appropriate policies and legislation will lead to a reduction of nitrogen for 10.9% and phosphorus for 8.2 % respectively of total nutrient loads discharged into the Black Sea.

275. According to the methodology on cost-effectiveness, the project contribution into the limitation of nutrients load could be estimated as 20% of the value for capital investments for nutrient reduction from non-point sources of pollution. Taking into consideration this assumption, the value of capital investments in case of BSERP is equal to 47.8 million USD for the period of 5 years (considering the UNDP-GEF BSERP project costs of 4.0 million

USD for the 1st period of 2 years (April 2002 – April 2004) and taking into account additional investments of 6,000,000 USD in the 2nd Phase of the project (July 2004 to June 2007)).

276. The cost-effectiveness of this Project lies in the opportunity to improve water quality in general and to reduce nutrients load (and other hazardous substances) in particular, thus contributing to the rehabilitation of the Black Sea ecosystems.

Literature

1. State of the Environment of the Black Sea 1996-2000. Publication of the Commission on the Protection of the Black Sea Against Pollution, Istanbul 2002.
2. Project Document, The UNDP-GEF Black Sea Ecosystems Recovery Project: RER/01/G33/A/1G/31: Control Of Eutrophication, Hazardous Substances And Related Measures For Rehabilitating The Black Sea Ecosystem: Phase1 (2000).
3. Project Brief, The Danube Regional Project, March 2003.

Appendix A Review of Project Progress in Phase I

In this section a brief review is presented on the progress of activities within Phase I of the projects, as well as the corresponding budget utilisation. A total of 27 activities were planned for implementation in Phase 1, 4 of which have been fully completed with 18 activities currently on-going (all but two will be continued into Phase 2). Of the 5 activities not started in Phase 1, all have been rescheduled until Phase 2.

Implementation of the Project Activities

Objective 1: Support the integration of a sustainable Secretariat for the Bucharest Convention

Support has been given to the work of Advisory Groups (AGs) through project staff and consultants. Capacity and performance of the AGs is ensured through staff time allocation for regional tasks. Capacity and commitment for serving for regional needs by the Regional Activity Centres has still to be improved. A survey was undertaken to evaluate the data gathering, assessment and exchange capacity and needs of Advisory Groups and Regional Activity Centres (RACs). The institutional set-up of the Black Sea Commission's framework is strengthened by the involvement of additional resources both human and financial. Equipment needs against functions of the focal points and Activity Centres were assessed and a short and medium term procurement plan was prepared and cost sharing arrangements with the EU Tacis project were agreed upon. Procurement of needed equipment has been initiated.

EU Tacis Assistance for the Black Sea Environmental programme was launched in summer 2002. The Tacis Project provides support for the three NIS countries together with the Black sea Commission. The Commission also received two additional grants from the EC in 2002. A number of activities, as well as other issues, are co-financed by the mentioned projects. This provides for a better cooperation of the resource deployment in the Black Sea region.

The Memorandum concerning cooperation between the Black Sea and Danube Commissions was signed in November 2001. A task force (DABLAS Task Force) was established as a platform for common decision making and encouraging investments for environmental protection, in particular for reduction of eutrophication. BSERP participates in the process. A Joint Technical Working Group was also established with the mandate to Develop harmonised monitoring systems, common assessment of the ecological status of inputs of nutrients and other hazardous substances, compatible reporting formats for input loads and the assessed ecological status, and formulate of appropriate measures to limit discharge of nutrients. Besides regular meetings (at least twice a year), electronic forum has been set up on the Project web site to facilitate operational exchange of opinions and form a means for discussions.

In relation to the production of public awareness material, the PIU has been responsible for publishing the 'Popular version of the Blacks Sea SAP' in Bulgarian, Turkish and, Romanian, languages[14]. The newsletter 'Black Sea Shared' was also published in English and posted on web in all local languages. A table-top calendar for the promotion of the Black Sea Environmental programme and introducing partners in the process was published for 2003. A reference book for coastguards, fishing communities are currently under preparation. A web page for the project had been developed and upgraded continuously, providing information on project related activities and a modern means of communicating with partners.

Objective 2: Regional actions for improving LBA legislation to control eutrophication and for tackling emergent problems

An in-depth study and stakeholder consultations at the national and regional levels by the UNEP/GPA team on existing legislation, policies and practices, and identification of gaps and prospects for change was delayed until recently due to a number of constraints. Data availability is a major constraint in conducting the referred analysis. The real situation is that environmental data is fragmented and obsolete, and is not assessed against socio-economic data. In order to improve the situation and to speed up implementation of this tasks a number of activities are being have been initiated, such as involvement of a consultancy specialised in the corresponding field, as well as reaching out into the region by involvement of a number of individual foreign and local consultants to support the UNEP/GPA team. Before suggesting commitments for the region and individual countries, the analysis and planning process must be undertaken by the UNEP/GPA, taking full account of economic, social, and political realities of the region such as the EU accession. This in-depth study is currently underway. Further cooperation on the initiatives of the EU has been coordinated for the latter half of Phase 1 and for Phase 2.with the DRP.

The study of emergent issues in the Black Sea and their social and economic root causes based on application of the GIWA methodology was also delayed during Phase 1. This was due to a lengthy disagreement of the planned activities of the GIWA team by the Permanent Secretariat who regarded the inadequacy and validity of data as a major constraint to the overall assessment. This activity is currently underway following a decision of the Project Steering Committee for the PIU to employ governmentally approved national consultants to provide the necessary data on behalf of the GIWA team.

Objective 3: Assist countries to improve their knowledge of the process of eutrophication in the Black Sea

An Advisory Board composed of select scientists from coastal countries was established with a view to prepare the research programme for the International Study Group (ISG). Previous scientific survey results were reviewed by the Advisory Board and proposals for research were agreed in 8 fields, each related to the management of nutrients and hazardous substances in the Black Sea. The Advisory Board evaluated 79 international proposals. Selected representatives of the chosen research projects met in January 2003 for the 1st meeting of the ISG in order to prepare the first draft of the research plan. Three surveys each having two legs were agreed

[14] English, Russian and Ukrainian were published previously.

upon and planned by the ISG in detail. Currently all contractual and logistical issues are being finalised. Other research activities, which are currently underway, include (i) the extended monitoring of nutrients (organic and inorganic) and hazardous substance inputs to the Black Sea from the Danube river, (ii) remote sensing (historical and current) using SeaWifs in combination with the research surveys to determine the necessary algorithms required to accurately calculate the level of chlorophyll a (phytoplankton growth) by satellite, add (iii) shore-based investigation of macrophytes (incl. workshop and training programme for regional representatives).

The first of the research cruises (benthic survey) was carried out successfully during September/October 2003. A pelagic research cruise planned for September/October was postponed until March/April 2003 (Phase 1) due to difficulties in signing contract with a local vessel. A further cruise is planned for winter 2004.

Objective 4: Introduce new sectoral policies and laws, and a system of process, stress reduction and environmental status indicators for monitoring the effectiveness of measures to control eutrophication (and harmful substances where appropriate)

The project suffered a delay in reaching an agreement on the methodology to be applied for analysing the relevant economic sectors (see also 2.above) and formulating measures for the reduction of nutrients and hazardous substances. Implementation of this activity was revised in late 2003. This task as originally intended could not be fulfilled without proven inter-ministerial cooperation or the direct involvement of stakeholders. A number of interventions were planned for initiation during the latter part of Phase 1. These include an agreement with the DRP on joint project implementation and the set up an institutional framework of the project implementation, which will strengthen the present cooperation and eventually lead to setting up of national and coastal inter-sectoral committees.

Environmental status indicators suggested in PDF-B phase were introduced to different Advisory Groups of the BSC for their review and feedback. The BSC Secretariat subsequently elaborated draft indicator-based reporting formats for continuous formal reporting to the BSC. BSERP provided support to the BSC in implementing of the reporting and developing a proper storage and retrieval means as a part of the Black Sea Information System. Along with this, the BSERP has also planned a 10 years historical data (environmental and socio-economic) compilation exercise which will be used for setting the background and justifying the validity of the final set of indicators to be adopted.

The BSERP consultant and BSC PS Staff conducted a survey of data and information gathering and exchange capacities of the network of institutions that are nominated for undertaking certain tasks within the framework of BSC. A draft strategy was elaborated for data and information exchange and submitted to the Advisory Group. The BSERP on its part is currently developing the architecture for relational databases in which the results of the data collation exercise will be entered. The databases will be accessible through the internet.

The basic approach for integrated monitoring and assessment programme for Black Sea (BSIMAP) has been established by the PS of BSC. After intensive consultations with the BSC PS and the corresponding Advisory Group (PMA), a pilot monitoring programme for environmental status indicators, as agreed by the JTWG of the BSC and the ICPDR, has been

designed and is currently underway. In order to ensure sustainability, the status-monitoring programme has to be an integral part of the BSIMAP.

Objective 5: Support the Commission in their periodic review of Adaptive Management objectives.

This activity in Phase 1 is represented by cost-benefit analysis of the national strategies for reduction of nutrients and hazardous substances. Since the national strategies will not completed until midway through Phase 2 (in association with the DRP), this activity is planned accordingly.

Objective 6: Assist the public in implementing activities to reduce eutrophication through a programme of grants for small projects and support to regional NGOs.

In relation to the Small-Grants Programme (SGP), 17 projects totalling 320,000 USD were sub-contracted in December 2002-January 2003 with completion dates of December 2003. Most of the sub-contracted projects incorporate a training component and lists will be available during the final evaluation of projects, scheduled for December 2003/January 2004. A strategy for the second call has been drafted and is currently under discussion. Following its adoption by the NGO communities, a second call will be made in early 2004.

A directory of Black Sea wetlands was prepared by international (Wetlands International) and local (NGOs) partners together with detailed recommendations on wetland conservation. A number of activities were held by NGOs on the International Black Sea Day., supported by the PS/PIU through press releases issued in all local languages, the newsletter published in English and posting on web on local languages. Preparations are also under way for making a video movie to acknowledge local populations with their ecological and economical significance. In relation to environmental education, measures were instigated to enrich the local character of the scientific contents of an education draft study pack. This was carried out to better coordinate with national education authorities operating in the region. The education study pack will be finalized and published in the latter part of Phase 1 (early 2004).

There was a delay in the operation of the Black Sea Train Sea Coast course development for agricultural management of nutrients in coastal regions. Following a curricula development workshop, held in Istanbul in February 2003, the course development unit proceeded to train new course developers. Completion of course planned for end 2003 with first delivery in the Black Sea coastal region in January 2004.

Objective 7: Formulate proposals for market-based or alternative economic instruments for limiting nutrient emissions and establish private-public sector partnerships for environmental protection in the Black Sea.

The methodology for environmental and economic analysis developed during Phase 1 will be further developed in Phase 2 in association with the DRP. A detailed analysis of existing international and regional economic instruments for nutrient reduction was successfully carried out during Phase 1 of the BSERP.

Activities have also been initiated in a number of riparian countries in the field of public-private sector partnership. The first phase has concentrated on (i) the analysis of the relevant stakeholders in the Black Sea riparian countries, (i) the legal base in each country and (iii) recommendation for future partnerships.

An updated priority investment portfolio prepared as part of (by technical and financing sub-committees) DABLAS Task Force established by the BS and Danube Commissions and supported by the EC. A separate activity was also initiated by the BSERP to determine the potential of the local and/or regional financial intermediaries as a means of channelling funding to small/medium sized bankable projects related to nutrient limitation and habitat restoration.

Objective 8: Fisheries exploited within its maximum sustainable yield and incorporating measures to protect ecologically sensitive areas.

Support was provided to the meetings of the AG Fisheries, where negotiations where restarted after 5 years. A background document suggesting main management and conservation issues that need to be incorporated in a regional strategy and legal instrument was elaborated by an international consultant. An ad hoc working group was created to work on fisheries related indicators. With a view to study the status and trends, a regional data compilation and evaluation exercise was undertaken through a team of national consultants as part of the formal reporting procedure for the BSC. Results were evaluated at a regional workshop to identify information gaps, establish a decision support system to be continuously operated, with the proper set of indicators for ecosystem-based fisheries. Required interventions at the regional level were identified. As a pilot activity, demersal resources were studied in depth. Coordination with international expert institutions (FAO-GFCM) for the inclusion of a regional coordinated stock assessment in GFCM work-programme was made and a proposal was drafted for submission by countries' fisheries authorities to FAO. A guidebook on Responsible Fisheries in the Black Sea to be published in all local languages and widely distributed to the local managers, fishermen and public is under preparation.

Utilisation of Phase I Budget

This section includes a brief description of the utilisation of the budget allocated for Phase I of the Project. Since the management team changed in early July 2003, all estimates are made for the period before and after July 2003.

Up until July 2003 the spending, which corresponded to the project activities, were at the level of 1,138,051 USD (from project start until July 2003), which was considerably lower than the needed rate of utilisation of the funds available. Following the budget revision in July 2003, a new work programme was established and executed.

The programme included a planned increase in the implementation of all project components. In accordance, a revised budget for the remainder of 2003 and 2004 was developed and is currently being implemented. The actual spend up to the end of 2003 has been estimated as being 2,768,764 USD. There is shortfall of 61,245 USD against the forecast spend in 2003.

The remaining funds, which total 1,231,232 USD, are fully planned to be disbursed between January and July 2004. Table 28 and Figure 3 below show the dynamics of the spending during Phase I of the Project.

Table 27 Progress of Implementation of Project Objectives in Phase I and Linkage to Phase II Activities

OBJECTIVES (Activities)	SUCCESS CRITERIA (in relation to project activities)	STATUS	
		Phase 1	Incorporation into Phase 2[15]
Objective 1: Support the integration of a sustainable Secretariat for the Bucharest Convention	Programme Implementation Unit (PIU) fully staffed and operational./Joint Management Committee established and operational	On-going/ Revised	Continued as 1.1.1 and 1.2.1
	Advisory Groups and Activity Centres operational and engaged in addressing transboundary issues	On-going	Continued as 1.1.3
	Istanbul Commission able to raise funding for transboundary projects	On-going	Continued as 1.2.4
	Inter-Commission Working Group operating and setting common management objectives	Not started	Planned as 1.1.2
	Information in the public domain throughout the Black Sea coastal region regarding the transboundary problems and solutions offered.	On-going	Continued as 5.1.4 and 5.3.5
Objective 2: Regional actions for improving LBA legislation to control eutrophication and for tackling emergent problems.	New LBA Protocol approved and endorsed	On-going	Continued as 2.1.1 and 2.1.2
	Black Sea Futures report approved by the Istanbul Commission and published.	On-going	Not Planned
Objective 3: Assist countries to improve their knowledge of the process of eutrophication in the Black Sea	Integration of international Study Group on Black Sea Eutrophication. Peer reviewed study plan.	On-going	Continued as 4.3.1
	Completion of surveys and studies of nutrient sources, sinks/fluxes	On-going	Continued as 4.3.1
	Publication of State of the Black Sea Report, 2003	Completed	
	Copies of the satellite colour scan maps and explanatory reports distributed widely in all six Black Sea countries.	On-going	Continued as 4.3.1

[15] Details could be found in **Error! Reference source not found.**: Logical Frame Matrix for Project Tranche 2 – Objectives, Outputs and Activities.

Table 27 Progress of Implementation of Project Objectives in Phase I and Linkage to Phase II Activities (continued)

OBJECTIVES (Activities)	SUCCESS CRITERIA (in relation to project activities)	STATUS	
		Phase 1	Incorporation into Phase 2
Objective 4: Introduce new sectoral policies and laws, and a system of process, stress reduction and environmental status indicators for monitoring the effectiveness of measures to control eutrophication (and harmful substances)	Written agreement of the agricultural, industrial and municipal government sectors in each country to cooperate on specific indicators and to help to develop and implement measures within their area of responsibility.	Not started	Revised as 2.2.1, 2.3.2, 2.4.3, 2.5.3 and 2.6.3
	Adopted new system of process, stress reduction and environment status indicators employed. Indicator data used to enforce existing/new laws, policies and regulations and for regional status and trends reports	On-going	Continued as 4.1.1
	Publishing of the pilot status monitoring report	On-going	Continued as 4.4.1 – 4.1.5
	Use of the information base by all six countries	On-going	Continued as 4.2.1
Objective 5: Support the Commission in their periodic review of Adaptive Management objectives.	Publication and positive reception of the Benefit-cost study	Not started	Planned as 3.1.1 – 3.1.5
Objective 6: Assist the public in implementing activities to reduce eutrophication through a programme of grants for small projects and support to regional NGOs	Full implementation of first tranche of projects (independent review).	Completed	
	Successful second call for proposals	On-going	Continued as 5.2.1– 5.2.5
	Effective contribution of NGO evidenced by the establishment of a regional NGO WG on nutrient reduction, media reports and presence at significant regional open meetings	On-going	Continued as 5.1.2
	Increased number of wetlands protected and/or restored	Not started	Planned as 2.2.3
	Lists of people trained (from each Black Sea country) through Train Sea Coast.	On-going	Continued as 5.1.3

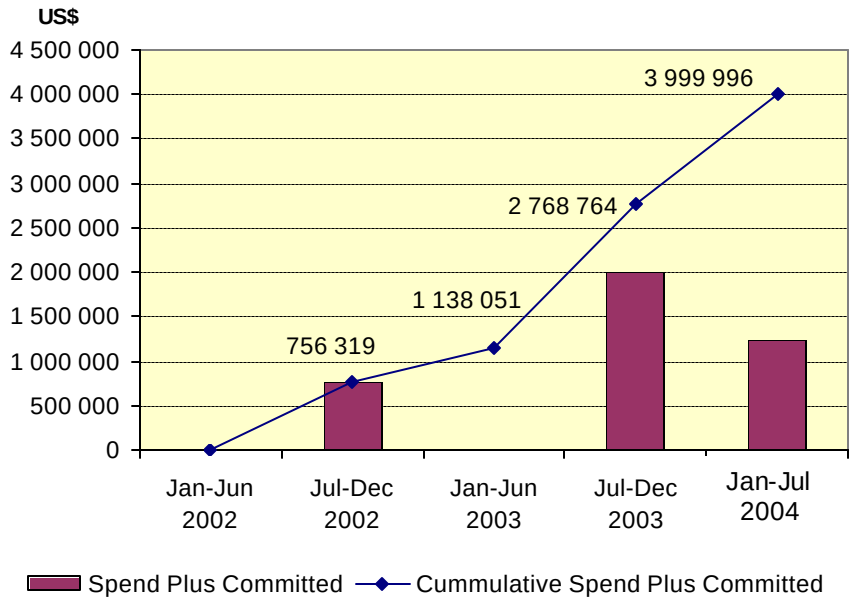
Table 27 Progress of Implementation of Project Objectives in Phase I and Linkage to Phase II Activities (continued)

OBJECTIVES (Activities)	SUCCESS CRITERIA (in relation to project activities)	STATUS	
		Phase 1	Incorporation into Phase 2
Objective 7: Formulate proposals for market-based or alternative economic instruments for limiting nutrient emissions and establish private-public sector partnerships for environmental protection in the Black Sea.	Reports of actions taken within countries to correct identified gaps in the application of economic instruments.	Completed	
	Highlight opportunities for public-private sector partnership in measures to limit nutrients within the coastal zone of the Black Sea	On-going	Continued as 3.2.4
	Review of potential nutrient-related investments channelled through regional or national development banks	Completed	Continued as 3.2.3
Objective 8: Fisheries exploited within its maximum sustainable yield and incorporating measures to protect ecologically sensitive areas.	Reports proposing effective protection of sensitive habitats as fisheries free zones and the subsequent adoption of a significant number of these areas.	On-going	Continued as 2.6.2
	Evidence of a successful dialogue between the Bucharest Convention and Fisheries Convention Secretariat/ negotiating bodies.	Not started	Planned as 2.6.1, 2.63 and 2.6.4
	Documentary evidence of the progress towards the conclusion of the new Biological and Landscape Diversity Protocol to the Bucharest Convention (prepared with BSEP (GEF and Tacis) funding.	On-going	Not planned

Table 28 Utilisation of Phase I Funding (Forecasted against Actual)

Budget Line Cluster	Total Project Budget After 01/07/2003 Revision	2002	Planned for 2003 according to Revision 01/07/2003			Actually Committed and Spent in 2003	2004 according to Revision 01/07/2003
			Actual Spend Jan-Jul 2003[16]	Planned for Jul - Dec 2003	Total 2003		
PIU International Staff	723 849	***319 186***	200 860	114 401	***315 261***	***315 261***	***89 401***
PIU Local Support Staff	203 566	***70 801***	42 919	40 673	***83 592***	***83 592***	***49 173***
International Consultants	189 205	***24 545***	0,034	77 013	***82 047***	***1 316 619***	***82 613***
National Consultants	302 406	***12 991***	3 215	161 650	***164 865***		***124 550***
Sub-contracts	1 011 799	***116 293***	12 253	470 886	***483 139***		***412 367***
Procurement of Equipment	601 179	***33 037***	4 197	474 251	***478 448***		***89 693***
Travel	130 401	***12 121***	4 456	54 162	***58 618***	***34 456***	***59 662***
Meetings/Training	328 852	***86 149***	63 446	129 623	***193 069***	***88 446***	***49 635***
Publications	143 078	***25 172***	17 075	12 000	***29 075***	***20,000***	***88 831***
Sub-Total	***3 634 334***	**700 295**	***353 456***	***1 534 658***	***1 888 114***	***1 863 375***	***1 045 925***
Contingency	69 365			34 527	34 527		34 838
Support Costs (8%)	296 296	**56 024**	28 276	125 535	151 049	149 070	89 223
TOTAL	**3 999 996**	**756 319**	**381 732**	**1 694 720**	**2 073 690**	**2 012 445**	**1 169 987**
					Underspent against planned in 2003	**61 245**	

Figure 3 Dynamics of Funds Utilisation in Phase I of the Project



[16] Year 2003 is split because there was a change in management team in early 2003.

Appendix B Terms of Reference of the International Project Personnel

1. Job Description - Programme Coordinator

General

The Programme Coordinator shall be responsible for the overall management of all aspects of the current project. He/She shall liaise closely with the National Coordinators appointed by the beneficiary Government and the representatives of the GEF partners and other donors. He/she shall be responsible for all substantive, managerial and financial reports from the Project.
He/She will provide overall supervision for all staff of the Project Implementation Unit (GEF-PIU) as well as guiding and supervising all external policy relations. He/she shall consult with, and coordinate closely with the executing and implementing agencies.

The responsibilities of the PIU of relevance to this post include:

- Detailed planning, budgeting and timely implementation of the project activities;
- Overall coordination of the relevant activities of donors, participants in the funding and implementation of the overall Black Sea Environmental Programme;
- Regular reporting to the Steering Committee on project progress through coordination meetings;
- Strengthening of project institutional network within the Black Sea riparian countries, (including ad hoc technical expert groups, as well as the Advisory Groups and regional Activity Centres of the Black Sea Commission) for the tasks specified in the current project document as well as the participation of NGOs and other stakeholders in project implementation;
- Establishment and functioning of national inter-ministerial bodies;
- Elaboration of nutrient management strategies which will incorporate revisions and amendments in laws and policies, and relevant indicators (process and stress reduction indicators) for government approval;
- Assessing the economic cost and benefits of the actions proposed in the nutrient management strategies;
- Reinforcing the legal background and promoting the implementation of GPA;
- Management of the Small Grants Programme;
- Diffusing project Outputs through newsletters, posters, technical reports, public information bulletins;
- Developing/updating/maintaining the existing BSEP web site jointly with the Permanent Secretariat.

- Preparation of progress reports concerning programme activities.
- Drafting of addenda to the BSSAP in line with the Outputs of the project
- Further development of the BSC information base;

Duties

The Programme Coordinator will have the following specific duties to:

- Manage the PIU, its staff, budget and Imprest fund;
- Prepare the annual work plan of the programme on the basis of the Project Document, in close consultation with the National Coordinators, GEF Partners, relevant donors and the Permanent Secretariat;
- Ensure overall coordination of the activities described in the work plan and the consistency between the various programme elements and related activities provided or funded by other donor organisations;
- Prepare and oversee the development of Terms of Reference for consultants and contractors;
- Submit substantive and operational reports from the Programme;
- Assist the Black Sea Commission in the integration of its Secretariat and institutional network and to plan activities jointly between the GEF-PIU and the Permanent Secretariat;
- Foster and establish links with other related Black Sea basin programmes in particular those for the Danube River Basin and Dnipro, and where appropriate, with other regional International Waters programmes.
- Coordinate the preparation of background documents on policies and good practices in the three sectors concerned aiming to reduce the emission of nutrients and other toxic substances in other parts of the world;
- Oversee the design of a common strategy and format for the six countries for the elaboration of national nutrient management, and for the efficient functioning of the national inter-ministerial committees;
- Coordinate the work of the inter-ministerial committees for the elaboration of national nutrient management strategies and for the identification of relevant process and stress reduction indicators;
- Facilitate the formal approval process for the national nutrient management strategies;
- Coordinate the synthesis of national nutrient management strategies into a regional plan as a supplement to the Black Sea-SAP for submission to the Black Sea Commission;
- Coordinate with the National Project Coordinators, national inter-ministerial committees and teams performing other activities under the current regional project (such as that of the International Study Group or the cost-benefit

analysis), as well as the World Bank which is implementing sectoral restructuring and investment programmes under the Partnership Investment Facility;

- Further establish linkages with relevant UN agencies or other global or regional organisations such as the OECD, EC with a view to obtain their support on thematic issues and for possible mainstreaming of project objectives in their work throughout the region;
- Ensure that the information gathered during the activities under his responsibility is disseminated through publications and/or web-site as appropriate.

Skills and experience required:

- Post-graduate degree in Environmental Management or a directly related field (e.g. applied marine science, natural resources economics, etc.)
- At least fifteen years experience in fields related to the assignment. At least ten years experience at a senior project management level. Demonstrated diplomatic and negotiating skills.
- Familiarity with the goals and procedures of international organisations, in particular those of the GEF partners (UNDP, UNEP, World Bank).
- Familiarity with the environmental problems of the region, and with nutrient reduction policies and practices elsewhere;
- Excellent knowledge of English.
- Familiarity with the coastal countries, knowledge of one of their languages would be an asset.

Duty station: Istanbul, Turkey
Duration: One year on a fixed term contract
Suggested post level P5

2. Job Description – Deputy Project Manager/Monitoring and Evaluation and Information Specialist.

The Monitoring and Evaluation and Information specialist/Deputy Project Manager will support the Project Manager in the detailed planning and implementation of the project activities and act as Project Manager in his absence. He will also be responsible for a number of environmental monitoring related, as well as all information and database (including GIS) related activities of the project. His responsibility will also be the updating, further development of the system established under the earlier stages of BSEP. He will work closely with other projects carried out under the overall BSEP framework, with those under the Strategic Partnership, with other information networks established under regional or international organisations (e.g. GEF, UNEP, EEA, OECD, NATO) or programmes. He/she shall work under the supervision of the Project Coordinator within the PIU.

The responsibilities of the PIU of relevance to this post include:

- Development and implementation of a set of monitoring and evaluation indicators for the project evaluation and assessment of the project results;
- Coordination, where appropriate, of the relevant activities of donors, participants in the funding and implementation of the overall Black Sea Environmental Programme, technical coordination with the international and regional programmes in the Black Sea;
- Detailed planning, budgeting and timely implementation of tasks related to the environmental monitoring (including some indicator-related activities), as well as the activities aimed at the strengthening of decision support informational and analytical tools;
- Pilot implementation of the environmental status programme;
- Design and implementation of a Data Assessment Strategy for the Black Sea region, on the basis of existing data assessment methodologies the development of a set of standardised tools to be further applied in the Black Sea basin (with an account of EU accession process);
- Holding of training event(s)/workshop(s) on statistical assessment techniques and tools developed;
- Implementation of the Information Strategy developed within the BSERP (Phase I)
- Continuation of the development and implementation of the BSC information base including databases, database management application and GIS system(s), web-based in particular;
- Continuation of the development and maintenance of the Project web site, the development of the Intranet network within the join office of the Permanent Secretariat of the Black Sea Commission and the BSERP PIU.

- Collection and dissemination of information on policy, economic, scientific and technical issues related to the programme;
- Production of technical reports, newsletters and non-technical leaflets and progress reports concerning programme activities.

Duties

The Monitoring and Evaluation and Information Development specialist will have the following specific duties:

- Support the Project Manager in all aspects of the administration and overall management of the Project.
- Develop and implement of a set of monitoring and evaluation indicators for the project evaluation and assessment of the project results
- Participate in planning, budgeting and timely implementation of tasks related to the environmental monitoring and informational support analytical tools;
- Continue the implementation of the common Information strategy and corresponding reporting formats for the six countries for the implementation of the Black Sea Information System, and all Advisory Groups, as well as those needed for information exchange with the ICPDR and the GEF UNDP Danube Regional Project;
- Liaise, where appropriate, with relevant UN agencies or other global or regional organisations such as the OECD, EC with a view to obtain their support on thematic issues and for possible mainstreaming of project objectives in their work throughout the region;
- Cooperate within his/her responsibilities with both the Black Sea regional and international programmes. Coordinate implementation of the tasks under his/her responsibility with the National Project Coordinators and teams performing activities under the current regional project;
- Coordinate activities related to the development and implementation of the monitoring and evaluation indicators for the project implementation and evaluation of the project results;
- Adopt existing data assessment methodologies in the Black Sea region, design and draft a set of manuals needed for the implementation of the methodologies, provide needed training where appropriate;
- Ensure that the information gathered during the activities under his/her responsibility is disseminated through publications and/or web-site as appropriate.
- Supervise upgrading of information products (including the Project web site, GIS) developed during the earlier stages of BSEP; to supervise data exchange and maintenance of the data communications network between BSEP cooperating institutions;

- Up keeping and running of all computer hardware and software in the PIU, including the establishment of an equipment register.
- Liaise with other programmes/projects, donors, and other organisations involved in establishing and managing scientific and substantial data and information on the marine and coastal environment, in particular pertaining to the Black Sea with a view to identify ways in which the Black Sea data and information can be integrated with on-going programmes.
- Preparation of progress reports concerning programme activities.

Duty station: Istanbul, Turkey;
Duration: One year on an ALD contract;
Suggested post level L4.

3. Job Description – Eutrophication/Marine Pollution Specialist

The Eutrophication/Marine Pollution Specialist will, under the supervision of the Project Coordinator, be responsible for coordinating the programme activities for developing and implementing research, monitoring and modelling approaches for nutrient (and hazardous substances) management strategies in the Black Sea coastal countries. She/he shall be based in the Project Implementation Unit (PIU), already established for this purpose. She/he will closely coordinate with (i) the International Study Group which will plan, coordinate and evaluate the results of the special surveys, (ii) the Permanent Secretariat of the Black Sea Commission, who are responsible for the development of the Black Sea Integrated Monitoring and Assessment Programme, (3) the project team responsible for the development and use of a rapid assessment methodology for estimation of point and diffuse sources entering the Black Sea from its basin, and (4) the project team which will study the costs and benefits of the actions proposed in the sectoral master plans and strategies. His/her duties will include daily administrative tasks associated with the overall management of the programme.

The responsibilities of the PIU of relevance to this post include:

- Review of historical data relating to the concentration and dynamics of nutrients and hazardous substances in the Black Sea; Publish in peer reviewed journal;
- Coordination of the BSERP nutrient research activities;
- Coordination of two BSC pilot monitoring exercises;
- Coordinate the design of a decision support system for the environmental management of the Black Sea (liaise with HELCOM for the adaptation of a working model currently used for the Baltic Sea);
- Elaboration of recommendations for improvement of such or introduction of new instruments for the control of eutrophication and pollution by other high priority toxic substances at the national and regional levels;
- Coordinating new sectoral policies and a system of indicators for monitoring the effectiveness of measures to control eutrophication and pollution by hazardous substances;
- Providing support for the assessing the economic cost and benefits of the actions proposed in the sectoral nutrient reduction master-plans;
- Production of technical reports, contribution towards newsletters and non-technical leaflets and progress reports concerning programme activities.

Duties

The Eutrophication/Marine Pollution Specialist will have the following specific duties:

- Liaise with the ISG for planning, coordination and evaluation of the results of the special surveys, including in particular, (i) nutrient cycling/dynamics, (ii) hindcasting

of nutrient levels, (iii) classification transitional and coastal waters (vi) factors determining whether nutrient enrichment results in eutrophication;

- Coordinating the review of nutrient research in the Black Sea region
- Coordinate with the Black Sea Permanent Secretariat and it's Advisory Groups with respect to the development, and implementation (including QA/QC) of the Black Sea Integrated Monitoring and Assessment Programme. She/he will be responsible for coordinating two pilot programmes which are planned to be carried out by the national laboratories designated under the BSIMAP;
- Liaise with the project team responsible for the development of a rapid assessment methodology for the estimation of point and diffuse sources entering the Black Sea from its basin;
- Provide advice and technical specifications for estuary and coastal water models (GIS-based) for predicting nutrient loadings, concentrations and eutrophication of rivers and lakes;
- Liaise with HELCOM and regional experts for the adaptation of the Baltic Sea's decision support system for environmental management for use in the Black Sea;
- Design a common strategy and format for the six countries for the elaboration of national sectoral nutrient reduction reviews,
- Support the work of the inter-ministerial committees for the elaboration of national sectoral nutrient reduction master-plans and for the identification of relevant process and stress reduction indicators;
- Coordinate the synthesis of national sectoral nutrient reduction master-plans into a regional plan as a supplement to the Black Sea-SAP for submission to the Black Sea Commission;
- Ensure that the information gathered during the activities under his/her responsibility is disseminated through publications and/or the project web-site as appropriate.
- Elaboration of recommendations for improvement of such or introduction of new instruments for the control of eutrophication and pollution by other high priority toxic substances at the national and regional levels;
- Introducing new sectoral policies and a system of environmental status indicators for monitoring the effectiveness of measures to control eutrophication;

Requirements

Skills and experience required:

- A degree and post-graduate experience in marine pollution with an emphasis on eutrophication research in transitional and coastal waters;

- At least ten years experience in similar international posts dealing with nutrient management of water bodies and international scientific/environmental management projects.
- Familiarity with the environmental problems of the region, and with nutrient reduction policies and practices elsewhere;
- Full fluency (spoken and written) in English. Working knowledge of another Black Sea (preferably Russian) language is essential.

Duty station: Istanbul, Turkey
Duration: One year on an ALD contract
Suggested post level: L4

4. Job Description – Regional Support Officer for Harmonisation with the EU Water Policies

General

In respect of implementation necessary measures and coordination activities in the area of the Black Sea ecosystem protection and rehabilitation, the Regional Support Officer for Harmonisation with the EU Water Policies will, under the supervision of the Project Coordinator, be responsible for the project components designed for providing appropriate support to the Commission on Protection of the Black Sea Against Pollution in its activities related to the establishment of the common platform with EU for economic development issues in relation with the Water Framework Directive (WFD) and the proposed Marine Strategy.

While three the Black Sea riparian countries (candidate countries: Bulgaria, Romania and Turkey) are under the process of accession to the European Union and have obligations to implement the respective measure on protection and rehabilitation of the Black Sea according to the WFD, it is important to approximate these measures of the candidate countries with the measures undertaken in this field by other three the Black Sea countries (Georgia, Russian Federation and Ukraine). It will synergize the efforts of all countries in the Black Sea basin in context of its environment protection and rehabilitation. She/he will establish direct working linkages with the representatives of respective governmental agencies, local municipalities and private business companies in the Black Sea region as well as with partners in the Danube and Dnipro basins in context of facilitation of the approximation process.

The duties of the Regional Support Officer for Harmonisation with the EU Water Policies will include daily administrative tasks associated with the overall management of the programme. She/he shall be based in the Project Implementation Unit (PIU), already established for this purpose.

The responsibilities of the PIU of relevance to this post include:

- Provide support to PS of BSC in respect of establishing a common platform with EU for economic development issues in relation with the WFD and the proposed Marine Strategy.
- Coordinating, where appropriate, with the relevant activities of donors, participants in the funding and implementation of the overall Black Sea Environmental Programme;
- Diffusion of information about the status of the Black Sea environment and last trends in the field of its protection and rehabilitation through the different means of information dissemination with the purpose to increase public awareness in this field.

Duties

The Regional Support Officer for Harmonisation with the EU Water Policies will have the following specific duties:

1. Maintain the Project liaisons in respect of informing the wider public in the Black Sea riparian countries those are not under accession to EU about activities and

achievements in the process of implementation of the WFD and Marine Strategy to coordinate their efforts in the field of protection and rehabilitation of the Black Sea environment.

2. Facilitate activities related to the support to the BSC in respect of creation the common platform with EU for economic development issues in relation with the WFD and the proposed Marine Strategy. It will include the following:
   - The economic analysis of water use within the Black Sea coastal area;
   - The economic assessment of potential measures for reaching good water status;
   - The assessment of the recovery of the costs of water services
3. In respect of activities mentioned in the point 2, the following steps should be facilitated:
   - Characterization of the Black Sea basin;
   - Identification of the coastal zones not achieving the environmental objectives of the Strategic Action Plan on Rehabilitation and Protection the Black Sea.
   - Support in development of the programme of measures to be integrated in the coastal zone management plans through cost-effective analysis.
4. Identify the group of experts that could be involved in the project activities and maintain relations with them in respect of completion particular project tasks.
5. Formulation of terms of references for the experts on respective project activities.
6. Provide necessary information and technical support to the three Black Sea countries (Georgia, Russian Federation and Ukraine) in their activities related to approximation of the measures on the protection and rehabilitation of the Black Sea in respect with the same measures introduced by other three the Black Sea countries (Bulgaria, Romania and Turkey) those are candidate countries for accession to the EU.
7. Liaise with other teams participating in the implementation of the Strategic Partnership in the Black Sea, Danube and Dnipro River basins and with the global NGO networks;
8. Assist in organizing consultations (including meetings) with other stakeholder groups, for introducing and implementing programme activities;
9. Liaison with the project partners, particularly with DRP, in respect to the sharing information about WFD and Marine Strategy in the BS countries that are not under EU accession process.
10. Collaborate with the project team working on data and information management and contribute to the web-site.

Requirements

- Post-graduate degree in environmental management or a directly related field.

- Demonstrable application of the harmonisation of the EU and national water policies;
- At least five years direct experience with the coordination of foreign assistance programs.
- Familiarity with the problems of the Black Sea region.
- Full fluency (spoken and written) in English and another Black Sea language.

Duty station: Istanbul, Turkey;
Duration: One year ALD contract;
Suggested post level: L3.

Appendix C Relevant Legally Binding Documentation

This Appendix contains:

1. The Headquarters Agreement Between the Government of Turkey and BSC
2. MoU between the BSC and the European Environmental Agency (EEA)
3. MoU between the PS of the Agreement on Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the contiguous Atlantic area Permanent Secretariat of the BSC
4. MoU between the Black Sea Commission and ICPDR (Danube)
5. Work Programme of the BSC for 2003-2004.

HEADQUARTERS AGREEMENT BETWEEN THE GOVERNMENT OF THE REPUBLIC OF TURKEY AND THE COMMISSION ON THE PROTECTION OF BLACK SEA AGAINST POLLUTION

The Government of the Republic of Turkey and the Commission on the Protection of the Black Sea Against Pollution;

Having regard to paragraph 11 of the Article XVII of the Convention on the Protection of the Black Sea Against Pollution;

taking into account paragraph 6 of the Article XVII of the Convention as per which the headquarters of the Commission and the Secretariat shall be established in Istanbul;

taking into account paragraph 8 of the Article XVII of the Convention according to which Representatives, Alternate Representatives, Advisers and Experts of the Contracting Parties shall enjoy in the territory of the respective Contracting Parties diplomatic privileges and immunities in accordance with international law;

taking into account the Agreement on Privileges and Immunities of the Commission on the Protection of the Black Sea Against Pollution;

considering that the Government of Turkey is also hosting the Programme Co-ordination Unit of the regional project entitled "Black Sea Environmental Programme", the objective of which is to assist the coastal States of the Black Sea for implementing the Convention, have agreed as follows:

Article I
Definitions

For the purposes of this Agreement:

a) "Convention" means the Convention on the Protection of the Black Sea Against Pollution signed in Bucharest, 21 April 1992;

b) "Contracting Party" means the State Party to the Convention;

c) "the Commission" means the Commission on the Protection of the Black Sea Against Pollution established in accordance with paragraph 1 of the Article XVII of the Convention and includes its Secretariat and other subsidiary bodies;

d) "the Secretariat" means the permanent body of the Commission to be established in accordance with paragraph 6 of the Article XVII of the Convention;

e) "Government" means the Government of the Republic of Turkey;

f) "the Host Contracting Party" means, as the case may be, the Contracting Party on the territory of which the Headquarters or premises of the Commission are located, a meeting of the Commission or of its organ is held and where any staff member of the Secretariat is while exercising mission for the Commission;

g) "Representatives of Contracting Parties" means Representatives, Alternative Representatives and other members of delegations sent by Contracting Parties to participate in the meetings held by the Commission or its organ, including Advisers and Experts of delegations.

h) "the Executive Director" means the principal administrator of the Secretariat;

i) "the Officials of the Secretariat" means the Executive Director and other officials appointed by the Commission and are subject to the staff regulations adopted by the Commission;

j) "the support staff" means the auxiliary, administrative and technical staff appointed by the Executive Director, including those who are locally recruited and assigned to hourly rates of payment and are subject to the staff regulations adopted by the Commission.

k) "premises of the Commission" means the buildings or parts of buildings and the land ancillary thereto, irrespective of ownership, used by the Commission, on a permanent or temporary basis, to carry out its functions.

Article 2

Interpretation

This Agreement shall be interpreted in light of its primary objective of enabling the Commission at its Headquarters in the Republic of Turkey (city of Istanbul) to discharge its responsibilities and fulfil its purposes and functions effectively.

Article 3

Juridical Personality

The Commission shall possess juridical personality. The Commission shall have the capacity:

a) to contract;

b) to acquire and dispose of immovable and movable property;

c) to institute legal proceedings.

Article 4

Immunity from Legal Proceedings

1. Within the scope of its activities, the Commission shall enjoy immunity from any form of legal proceedings, except in the case of:

a) civil action by a third party for damages arising out of an accident caused by a vehicle belonging to or operated on behalf of the Commission, where these damages are not recoverable from insurance;

b) civil action relating to death or personal injury caused by an act or omission of the Commission or its staff member.

2. Without prejudice to the provision of paragraph 1 of this article, the property and assets of the Commission wherever located and by whomsoever held, shall be immune from search, requisition, confiscation, expropriation and any other form of interference, whether by executive, administrative, judicial or legislative action.

Article 5

Premises

1. The Government shall provide a convenient building to the Commission free of rent for an unlimited time. The location of the permanent headquarters of the Commission will be selected in consultation with the Commission. The premises of the Commission may be changed upon mutual agreement.

2. The Government shall undertake to facilitate the acquisition or hire of additional premises by the Commission at such time as they may be needed.

3. Any location other than the Commission premises which may be used in concurrence with the Government for meetings convened by the Parties or the Commission shall be temporarily considered as a part of the headquarters.

4. The Government and the Commission may jointly agree to allow for the temporary or permanent use of the headquarters by third parties involved in studies or programmes pertaining to the Black Sea.

5. The premises of the Commission shall be supplied with necessary public services, including electricity, water, sewerage, gas, post, telephone, facsimile, telex, modem, electronic mail, drainage, collection of refuse and fire protection; and that such public services are rendered on terms not less favourable than that accorded by the Government to other inter-governmental specialised agencies.

6. The premises of the Commission shall be inviolable.

7. The Government of the Host Contracting Party shall provide appropriate security consistent with the status of the Commission as an Inter-Governmental Organisation against any intrusion or damage and to prevent any disturbance of the peace nearby or in the premises of the Commission.

Article 6
Funds and Currencies

Within the scope of its functions, without being restricted by financial controls, regulations or moratoria of any kind, other than exercised by the Contracting Parties jointly, the Commission:

a) may hold funds, gold or currency, of any kind and operate accounts in any currency;

b) may freely transfer their funds, gold or currency, from one country to another or within the Host Contracting Party and convert any currency held by it into any other currency.

Article 7
Inviolability of Archives

The archives of the Commission shall be inviolable wherever located or by whomsoever held. The term "archives" means all records, correspondence, documents, manuscripts, photographs, films and recordings belonging to or held by the Commission or by any physical or juridical persons nominated by the Commission to this effect.

Article 8
Expenditures

1. The Government shall meet 40 % of the total amount of initial expenditures regarding the establishment of the Headquarters of the Commission. The remaining 60 % of the total amount shall be met by the other Contracting Parties.

For a period of three years, the Government shall meet 40 % of the operational expenses of the Commission. The remaining 60 % of such expenses shall be met by the other Contracting Parties.

2. a) Equipment such as computers, printers, CD-ROM units, facsimile and photocopying machines, modem and other equipment required by the Commission and the Secretariat will be purchased from the budget of the Commission.

b) Furniture and other office elements/systems will be purchased from the budget of the Commission.

c) All maintenance and operational expenses regarding (a) and (b) above will be covered from the budget of the Commission.

d) The running costs, such as electricity and water supply (including air conditioning/cooling), telephone, facsimile, E-mail and other communication charges, cleaning, routine keep-up and sanitary services of the Secretariat will be covered from the budget of the Commission.

Article 9
Exemption from Customs and Excise Duties

1. The Commission, its assets, income and other property shall be exempt:

a) from all direct taxes, including income and corporate taxes: it is understood, however, that the Commission will not claim exemption from taxes which are in fact no more than charges for public utility services;

b) from customs duties and restrictions on imports and exports in respect of articles imported or exported by the Commission for its official use and its publications with the exception of charges levied for specific services which may be imposed on the Commission by reason of such imports and exports; it is understood, however, that articles imported under such exemption will not be sold in the country to which they were imported except under conditions agreed to with the Government concerned;

c) for the purposes of this article, the term duties means custom duties, taxes and related charges which are established, or can be established, in accordance with regulations of the respective Contracting Parties.

2. The Commission shall not, as a general rule, claim exemption from excise duties and from taxes such as VAT on the sale of services or movable and immovable property which form part of the price to be paid. Nevertheless, when the Commission is making important purchases for official use of services or property on which such duties and taxes have been charged or are chargeable, the Government of the concerned Contracting Party shall, whenever possible, make appropriate administrative arrangements for the remission or return of the amount of duty or tax.

Article 10
Communications and Publications

1. The Commission shall enjoy, in the territory of Turkey, for its official communications, treatment not less favourable than that accorded by the Government to other UN specialised agencies in the matter of priorities, rates and taxes on mails, cables, telegrams, radiograms, telephotos, telephone and other communications, and press rates for information to the press, television and radio.

2. No censorship shall be applied to the official correspondence and other official communications of the Commission.

Article 11
Contacts with the Government

The Executive Director is authorised to contact the Government directly for issues pertaining to the activities and to the day to day management of the Secretariat. However the

counterpart of the Government on substantial issues shall be the Commission through its Chairman.

Article 12
Representatives of the Contracting Parties and the Chairman of the Commission

1. Representatives of Contracting Parties and the Chairman of the Commission, while exercising their functions and during their journeys to and from the place of meetings, enjoy the diplomatic privileges and immunities as stated in paragraph 8 of the Article XVII of the Convention. This provision is not applicable between a representative and the authorities of the Contracting Parties of which he or she is a national or a permanent resident.

2. Privileges and immunities accorded to persons, mentioned in paragraph 1 of the present article, are intended to safeguard the independent exercise of their functions in connection with the Commission and are not for the personal benefit of the individuals themselves. Consequently, it is incumbent on a Contracting Party to waive the immunity of its representatives or national acting as the Chairman of the Commission, if in the opinion of the Contracting Party, the immunity would impede the course of justice, and where it can be waived without prejudice to the purpose for which the immunity is accorded.

Article 13
Officials of the Secretariat

1. Officials of the Secretariat shall be immune from legal processes in respect of words spoken or written and all acts performed by them in the exercise of their official functions or to produce official correspondence and documents relating thereto;

2. Officials of the Secretariat except those who are the nationals of the Republic of Turkey and permanent foreign residents shall enjoy within and with respect to the Republic of Turkey the following privileges and immunities:

a) Exemption from taxation in respect of salaries and emoluments paid to them by the Commission and on the same conditions as are enjoyed by the officials of the United Nations of comparable rank in the territory of the Republic of Turkey in accordance with the "Convention on the Privileges and Immunities of the United Nations" (1946);

b) Exemption in respect of themselves, their spouses and their dependents of under age 18 from immigration restrictions, aliens registration, from all personal services, from all public services of any kind whatsoever, and from military obligations such as those connected with requisitioning, military contributions and billeting in the territories of the Republic of Turkey;

c) Privileges in respect of exchange facilities as are accorded to officials of comparable rank of United Nations of comparable rank in the Republic of Turkey, in accordance with the "Convention on the Privileges and Immunities of the United Nations" (1946);

d) With their spouses and relatives dependent on them, the same repatriation facilities in time of international crises as accorded to officials of comparable rank of the United Nations in the territory of the Republic of Turkey, in accordance with the "Convention on the Privileges and Immunities of the United Nations" (1946);

e) The right to import free of duty their furniture and effects at the time of first taking up their post in the Republic of Turkey, as provided for by the "Convention on the Privileges and Immunities of the United Nations" (1946) with respect to officials of the United Nations.

If the officials of the Secretariat on the termination of their functions export furniture and effects to which this paragraphs applies, they shall be exempt from any customs duties, except payments for services, which may be imposed by reason of such export.

3. Privileges and immunities are granted to officials in the interests of the Commission only and not for the personal benefit of the individuals themselves. The Commission shall have the right and the duty to waive the immunity of the officials of the Secretariat, including the Executive Director in any case where, in its opinion the immunity would impede the course of the justice and can be waived.

4. With the purpose of facilitating the performance of their functions, identification cards with the same effect of the residence permits shall be issued to them, their spouses and their dependents of under age of 18, by the Government.

Article 14

Support Staff of the Secretariat

1. The support staff of the Secretariat are under no obligation to give evidence concerning matters connected with the exercise of their functions, or to produce official correspondence and documents relating thereto;

2. The support staff of the Secretariat except those who are the nationals of the Republic of Turkey and permanent foreign residents in its territory:

a) shall with respect to services rendered for the Secretariat be exempt from any obligations in regard to work permits imposed by the laws and regulations of the Republic of Turkey concerning the employment of foreign labour;

b) shall be exempt from dues and taxes on wages which they receive for their services;

c) shall be exempt of all personal services, from all public of any kind whatsoever and from military obligations such as those connected with requisitioning, military contributions and billeting in the territory of the Republic of Turkey.

3. With regard to the support staff of the Secretariat except those who are the nationals of the Republic of Turkey and permanent foreign residents in its territory, the Government shall issue identification cards in conformity with their status. These identification cards will be used in 1ieu of residence permits.

4. The Executive Director shall have the right and the duty to waive the immunity of a member of the support staff provided for in paragraph 1 of this article in any case where, in his or her opinion the immunity would impede the course of justice and can be waived.

Article 15

Social Security

The provisions of the Vienna Convention on Diplomatic Relations, dated 18 April 1961 shall be applicable to the officials of the Secretariat in matters concerning social security.

Article 16

Cooperation

The Commission shall cooperate at all times with the competent authorities of the Government to facilitate proper administration of justice, to secure the observance of police regulations and to prevent the occurrence of abuses in connection with the privileges, immunities and facilities mentioned in Articles 13 and 14 above.

Article 17

Notification of appointments

The Executive Director shall annually send to the Government, a list of all the officials and support staff of the Secretariat. The Executive Director on behalf of the Commission shall inform the Government when an official of the Secretariat takes up or relinquishes his duties. The Executive Director shall in each case indicate whether or not the individual concerned is a national of or resident in the Republic of Turkey.

Article 18

Amendments

The Commission and the Government may at any time propose an amendment to this Agreement and it can be amended through negotiation between the Commission and the Government.

Article 19

Settlement of Disputes

Any dispute that may arise from the interpretation and implementation of this Agreement shall be resolved through negotiation between the Government and the Commission.

Article 20

Entry into force and termination

The present agreement shall enter into force on the date following the day the Depositary receives written information from the Government of Turkey on the ratification of this agreement in accordance with the national procedures, and shall be valid as long as the location of the headquarters is in Istanbul.

In the event of the headquarters of the Commission being moved from the territory of the Republic of Turkey, this Agreement shall cease to be in force after a reasonable period required for such transfer and the disposal of the property of the Commission in the Republic of Turkey upon the decision taken by the Contracting Parties.

Done in Istanbul, on the 28th day of the month April two thousand in the English and Turkish languages, in three copies, both texts being equally authentic which are going to be maintained by the Depositary, by the Government of the Republic of Turkey and by the Black Sea Commission.

On behalf of the Commission	On behalf of the Government of the Republic of Turkey

MEMORANDUM OF UNDERSTANDING
BETWEEN THE COMMISSION ON THE PROTECTION OF THE BLACK SEA AGAINST POLLUTION (BSC) AND
THE EUROPEAN ENVIRONMENT AGENCY (EEA)

The Commission on the Protection of the Black Sea Against Pollution (hereinafter referred as "the Commission") and the **European Environment Agency (**hereinafter referred as "the Agency")

RECOGNIZING that the Commission

a. was established in order to promote and coordinate common policies and regional actions under the 1992 Convention on the Protection of the Black Sea Against Pollution which was signed in Bucharest on 21 April 1992, including its Protocols (Bucharest 21 April 1992) on Protection of the Black Sea Marine Environment against Pollution from Land-Based Sources; on Co-operation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations, on the Protection of the Black Sea Marine Environment against Pollution by Dumping and the Black Sea Biodiversity and Landscape Conservation Protocol (Sofia 14 June 2002);
b. has established the regional institutional and expert network under the Convention in monitoring and assessment of pollution; in pollution control from the land-based sources; in conservation of biological diversity, in environmental safety aspects of shipping, in environmental aspects of management of fisheries and other marine living resources, and in integrated costal zone management;
c. seeks, where appropriate, to cooperate with competent regional organisations and other competent international organisations and competent bodies;

RECOGNIZING that the Agency

a. was established by a Council Regulation (EEC) Number 1210/90 of 7 May 1990 amended by Council Regulation 933/1999 of 29 April 1999 of the European Community with the aim of producing objective, reliable and comparable information for the implementation and the further development of the European environment policy;

b. has established, in cooperation with the Member States, a European Environment Information and Observation Network, having as one of its elements, a network of European Topic Centres set up to carry out particular tasks identified in the Annual and Multi Annual Work Programmes;

c. seeks to cooperate with other relevant national, regional and global environmental programmes and institutions.

RECOGNIZING that both the Commission and the EEA are intergovernmental organisations which ensure the observance of the normal standards of public bodies in their work.

Have reached understanding on the following:

General

1. The aim of this Memorandum of Understanding (hereinafter referred to as "the Memorandum") is to set up the cooperation between the Commission and the Agency on the basis of the principles of reciprocity and work sharing.

2. Cooperation between the Commission and the Agency shall, *inter alia*, be focused on ensuring mutual compatibility of data, information and approaches to information provision and dissemination in the environmental field, based on their respective Work Programmes and avoiding duplication of efforts.

3. The principles of reciprocity and work sharing implies a free flow of mutually useful information and data between the two organisations that should not be paid for.

4. However, if the Commission or the EEA require assistance from the other organisation for the implementation of specific projects which are not included in the Work Programme of the other organisation, then the Commission or the EEA should be ready to award contracts for the implementation of such projects, following normal contractual agreements and procedures.

5. Cooperation between the Commission and the Agency at the strategic level shall be made with reference to the Commission's annual work programmes of the Commission and its Advisory on the one hand and the Agency's annual and multi-annual work programmes on the other hand. The Commission and the Agency will develop, approve and implement a Work Plan for the implementation of this Memorandum.

6. The working link between the Commission and the Agency will be handled at an appropriate level, complemented by review meetings between the Coordinator of the Commission and the Executive Director of the Agency, at a frequency established by them. The Executive Secretary of OSPAR, of HELCOM and of the Barcelona Convention UNEP-MAP Secretariats shall be invited to attend these meetings. Other relevant international organizations may be invited to attend these meetings.

Cooperation with European Topic Centres

7. Cooperation between the Commission and the European Topic Centres on Water (ETC/WTR), on Nature Protection and Biodiversity (ETC/NPB) and on Terrestrial Environment –including coastal zones- (ETC/TE) will be established within the 'Inter-Regional Forum' (IRF) operated under the responsibility of the ETC/WTR. Cooperation will focus on the following topics:

   a. promotion of new methodologies for monitoring;
   b. provision of data products and information;
   c. harmonisation of reporting procedures and requirements;
   d. review and use of assessment techniques and tools;

8. A representative of the Agency will be invited to participate in meetings of the Commission as well as representatives of the ETC/WTR, ETC/NPB and of the ETC/TE in the relevant meetings of the Advisory Groups.

9. 9. Travel and accommodation expenses of one representative of the Commission participating the IRF conference or workshop will be reimbursed by the ETC/WTR.

10. Cooperation on specific topics will be established between the Commission and other European Topic Centres, for example, the European Topic Centre on Air and Climate Change and the European Topic Centre on Waste and Material Flows.

Assessment reports

11. The Commission will contribute to the establishment of European-wide assessment reports on marine environmental issues of the Agency, using work carried out within the framework of the Commission's joint monitoring and assessment activities.

Disputes

12. If there is any dispute between the Commission and the Agency concerning the implementation of this memorandum, both sides shall endeavour to resolve it by agreement reached through consultation. If there is any difficulty in reaching such agreement, the Executive Directors of the Commission and the Agency may designate one person each who will than invite a suitable third person who is not employed by or an office holder in either the Commission or the Agency, to assist them on a honorary basis in considering the matter and making a recommendation for the resolution of the dispute.

The Memorandum of Understanding

13. This MoU may be amended by mutual agreement. Such amendment will come into force on the date such amendment is signed by the two parties.

14. Either party may terminate this MoU by giving six months notice to the other party.

15. This MoU will come into effect upon signature.

For the Black Sea Commission	**For the EEA**
Signature :	**Signature** :
Zaal Lomtadze **BSC Chairmen**	**Gordon McInnes** **Acting Executive Director**

Date: May 2003

MEMORANDUM OF COOPERATION

between the Permanent Secretariat of the Agreement on Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the contiguous Atlantic area

and

the Permanent Secretariat of the Commission for the Protection of the Black Sea Against Pollution

concerning the Sub-regional Coordinating Unit for the Black Sea

The Permanent Secretariat of the Agreement on Conservation of the Cetaceans of the Black Sea, the Mediterranean Sea and the contiguous Atlantic area (ACCOBAMS) as referred as "the Agreement", hereafter referred to as the Permanent Secretariat of the Agreement

And

The Permanent Secretariat of the Commission for the Protection of the Black Sea Against Pollution
hereafter referred to as the Black Sea Commission Permanent Secretariat

stressing that:

- ACCOBAMS was born of an inter-convention process including Bucharest, Barcelona, Bern and Bonn Conventions;
- the Preamble to the Agreement refers to the Convention for the Protection of the Black Sea Against Pollution adopted in 1992;
- Resolution 3, adopted at the Diplomatic Conference on the Protection of the Black Sea, Bucharest, April 21-22, 1992, inviting "other intergovernmental organisation to cooperate with the Contracting Parties and/or the Commission by preparing and implementing specific programmes and projects, with a view to fulfilling the objectives of the Convention"
- The Declaration on the Protection of the Black Sea, Odessa, April 6-7, 1993;
- The Strategic Action Plan for the Rehabilitation and Protection of the Black Sea adopted in 1996 includes conservation measures for the marine mammals as foreseen also in the Agreement's Conservation Plan;

Evoking:

- Article I.3.j describing the two sub-regions of the geographical scope of the Agreement: "the Black Sea" and "the Mediterranean and the contiguous Atlantic area"
- Article III.4 providing for, amongst other things, granting permanent observer status to the Permanent Secretariats of the other regional conventions and agreements concerned inter alia with the conservation of cetaceans;
- Article V of the Agreement instituting sub-regional coordinating units and defining their functions;
- Article III, 7 c stating that the Parties to the Agreement will designate "in each sub-region, within an existing institution, a Coordination Unit";

- the recommendation made to the Agreement's Interim Permanent Secretariat[17] by the signatories of the Final Act of the negotiation Meeting of the ACCOBAMS (Monaco, 24 November 1996)[18], that it would approach relevant inter-governmental organisations of the Black Sea and the Mediterranean, with a view to identifying the Sub-regional Coordinating Units envisaged in Article V of the Agreement;

Evoking also

- Article VIII of the Bucharest Convention calling on the Black sea Commission to cooperate with competent international organizations, especially with a view to developing appropriate programmes or obtaining assistance in order to achieve the purposes of this Convention.
- The Odessa Declaration *recognizing* that the rehabilitation, protection and preservation of the Black Sea can be ensured only through bilateral and multilateral cooperation, including cooperation with relevant international organizations;
- The Declaration on the Conservation of Black sea Marine Mammals, issued from the First International Symposium on the Marine Mammals of the Black sea (Istanbul, 27-30 June 1994) under the auspices of UNEP and Black Sea Environmental Program which *inter alia* calls the Governments of the Black Sea Countries "to conclude an Agreement under the Bonn Convention for the conservation of marine mammals of the Black Sea" on the basis of elements annexed to the Declaration.
-

Acknowledging

- That ACCOBAMS' Conservation Plan and the Strategic Action Plan for the Rehabilitation and the Protection of Black Sea present a set of converging goals on marine mammals conservation, confirming the potential synergies between the two Plans;
- That ACCOBAMS Conservation Plan fits with the recommendation of the Odessa Declaration "to encourage the development of comprehensive and coordinated plans for the restoration and conservation of biodiversity in the Black Sea" and "to take appropriate measures for the restoration and conservation of biodiversity in the Black Sea in the spirit of the 1992 Biodiversity Convention."
- That ACCOBAMS could be another link with and UNEP-OCA/PAC Regional Seas Program on training of environment specialist and protection of endangered species;
- That ACCOBAMS upgrade Black Sea Cetacean Action Plan at an compulsory level;

Underlining some common concerns, *inter alia*:

- Adoption and enforcement of national legislation
- Assessment and managements of human/marine biodiversity interaction including tourism and fisheries;
- Reinforcement of anti pollution measures;
- Attenuation of Fisheries interactions impact on biodiversity;
- Habitat protection, stressing the need to establish and improve nature conservation areas, which as ACCOBAMS stated, should be, as far as possible, established within the framework of appropriate instruments;
- Research and monitoring;

[17] By the time the Permanent Secretariat of the Black Sea Commission was not yet established
[18] In particular by the 5 Black Sea Countries present

- Capacity building, collection and dissemination of information, training and education; covering public awareness and participation;
- Response to emergency situations;
- Implementation the Convention on Biological Diversity on a regional context;

Have agreed upon the following:
The Black Sea Commission Permanent Secretariat will be granted the permanent observer status to the Contracting Parties meetings pursuant to Article III. 4 of the Agreement.

The functions related to the ACCOBAMS Sub-regional Coordination Unit for the Black Sea (BSSRCU) are entrusted to the Black Sea Commission Permanent Secretariat. The activities of the BSSRCU will focus on the Black Sea as defined by Article I of the ACCOBAMS.
Roles and functions of the BSSRCU :

The BSSRCU's functions will consist in[19]:
- facilitating and promoting the implementation of the Conservation Plan of ACCOBAMS taking in consideration the guidance of the Meeting of the Parties to the Agreement;
- collecting and assessing the information which will allow the aims of implementing the ACCOBAMS to be better reached, and an appropriate broadcasting of this information provided for;
- providing administrative and technical support at the ACCOBAMS Black Sea sub region level for the meetings of the Scientific Committee and preparing a report for the meeting of the Contracting Parties of the ACCOBAMS through the Permanent Secretariat of the Agreement on the implementation of the activities carried out within the ACCOBAMS framework in the area covered by the BSRCU.

The Black Sea Commission Permanent Secretariat will provide the link with the measures and activities of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea, with the view of ensuring that the activities carried out within the ACCOBAMS framework and those carried out in the context of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea are in synergy to the extent possible.

The BSSRCU representative will attend the meetings of the Scientific Committee of ACCOBAMS and will assist the Agreement Permanent Secretariat in ensuring the Permanent Secretariat functions of these meetings.

Furthermore, in consultation with the Scientific Committee and the Permanent Secretariat of the Agreement, the BSSRCU:
- will facilitate the preparation of a series of international reviews or publications, to be updated regularly including:
  - reports on the status and trends of populations, as well as gaps in scientific knowledge;
  - a sub-regional directory of important areas for cetaceans;
  - a sub-regional directory of national authorities, research and rescue centres, scientists and non-governmental organisations concerned with cetaceans.

[19] ACCOBAMS Article V

- will cooperate with the Permanent Secretariat of the Agreement to prepare guidelines dealing *inter alia* with:
  - the reduction or elimination, as far as possible of adverse human/cetacean interactions;
  - habitats protection and natural resources management methods as they relate to cetaceans;
  - emergency in case of massive stranding, major pollution event or epizootics;
  - rescue methods for wounded or sick animals

ACCOBAMS Permanent Secretariat will,

- Present sub regional priorities and their budgetary implications, drafted in collaboration with BSSRCU, for consideration by its Meeting of the Parties;
- Look for financial resources oriented to these priorities, through the supplementary conservation Funds;
- Facilitate sub regional NGO participation to ACCOBAMS implementation and education
- Stress the need of capacity building for the sub region and facilitate exchanges with the Mediterranean and Atlantic contiguous zone sub region;
- Provide the Permanent Secretariat for the Commission for the Black Sea with the information and documentation that are necessary for implementing the present Memorandum, and will take the necessary steps to facilitate BSSRCU missions in the countries of the region.

Practical and financial arrangements

The Permanent Secretariat of the Agreement and the Black Sea Commission Permanent Secretariat will consult together with a view to ensuring that the ACCOBAMS, the Convention on the Protection of the Black Sea Against the Pollution and the Strategic Action Plan in the field of biodiversity, as well as any other related activity, will be harmoniously implemented, and will ensure as far as their means permit that meetings and other events organized within the ACCOBAMS framework and that of the Convention on the Protection of the Black Sea Against the Pollution and the Strategic Action Plan on the relevant field will be co organised, organized back to back, or permit that their respective representatives take part as observers in order to achieve the most effective use of the funds available;

The Permanent Secretariat for the Commission for the Black Sea will assign to one of its experts to guarantee the monitoring of the technical implementation of the present Memorandum and will be the technical vis-à-vis of the Permanent Secretariat of the Agreement.

In order to facilitate the implementation of the present memorandum a programme-budget is established according to the priorities defined by the Contracting Parties to ACCOBAMS and approved by the Black Sea Commission. It will be part of the ACCOBAMS budget and could be presented in the annex to this Memorandum and could be jointly amended by the two parties to take into account the decisions of the ACCOBAMS Contracting Parties and funds availability. The activities of the BSSRCU mentioned in the "Roles and Functions of the BSSRCU" part of this Memorandum will be implemented as far as funded by this programme-budget.

These funds shall be used to implement activities that are additional or complementary to those carried out by the Commission on the Protection of the Black Sea Against Pollution within the framework of the implementation of the Convention on the Protection of the Black Sea Against Pollution and the Strategic Action Plan. For the activities within the Black Sea Convention and Action Plan or within ACCOBAMS implementation whose objectives are in conformity, co-funding mechanism should be, as far as possible, explored.

The Permanent Secretariat of the Agreement and the Permanent Secretariat of the Commission on the Protection of the Black Sea Against Pollution will act together to obtain supplementary funding to that provided by the Agreement Parties' contributions.

The Permanent Secretariat of the Commission for the Black Sea, after consultation with the Agreement Permanent Secretariat, could subcontract the carrying out of certain activities covered by the present Memorandum of Cooperation. But it does remain the sole responsible vis-à-vis of the Permanent Secretariat of the Agreement for the activities in question.

Before 31 January every year, the Permanent Secretariat BSSRCU will make an annual report on the activities being carried on in the context of the present Memorandum, including information on use of the budget set aside for the BSSRCU. Preparation of any other reports could be stipulated by the two Permanent Secretariats on case-by-case basis and taking into account the resources availability

Legal rights on the products of activities

All the legal rights world-wide concerning the products (documents, maps, drawings and photographs, etc) of activities being carried on in the context of the present Memorandum of Agreement belong to the Permanent Secretariat of the Agreement and to the Permanent Secretariat of the Commission for the Black Sea. Both Parties may use as they find convenient the said products for non-commercial purposes.

Confidentiality

As a general rule, any information or product directly concerning the present Memorandum of Cooperation or related to it, including documentation, correspondence, preliminary and final reports, and audio-visual material, is open for public consultation. But when one of the two Parties believes that the circumstances require confidentiality, it may request the other Party to treat the information or product in question as confidential information or a confidential product.

Duration and Amendment

This memorandum will go on until the next Meeting of the Parties of ACCOBAMS and could be renewed by tacit agreement, taking into account that, pursuant to article III .8and V.1 of the Agreement, at each their ordinary session the Meeting of the Parties will review, as appropriate, the arrangements of the sub-regional Coordination units.

Entering into force

The present memorandum of cooperation will enter into force one month after its signature by both Parties.

Denunciation

The present memorandum could be denunciated on decision of ACCOBAMS Contracting Parties (or its Bureau) or Black Sea Commission. The denunciation shall take effect sixty days after notification by written to both Permanent Secretariats.

Done in Sofia on the 14th day of the month of June in two copirs in the English language.

….

For the Black sea Commission Permanent Secretariat
(signed)
Plamen Dzhadzhev,
BSC PS Executive Director

For ACCOBAMS Permanent Secretariat
(signed)
Marie-Christine Van Klaveren
ACCOBAMS Executive Secretary

APPENDIX
Programme and funds availability for the period 2002-2004

The activities proposed below, for the first implementation period (2002-2204), were worked out taking into account the provisions of ACCOBAMS and the priorities adopted within the Strategic Action Plan of the Bucharest Convention and approved by the Contracting Parties to ACCOBAMS. Their actual implementation will be subject to funds availability.

Activities	Estimated budget	Other sources	Term
Elaboration of the Black Sea directory of national authorities, research and rescue centres, and non-governmental organisations dealing with cetaceans **Products:** Electronic-format directory that can be installed on website and printed			6 months
Code of conduct for strandings of live cetaceans **Product:** Code of conduct			18 months
Workshop on interaction with fishing **Products:** Technical documentation Workshop			24 months
Cetacean Survey in the Black Sea **Product:** Report on the cetacean populations in the Black Sea, including the results of the assignment			
Technical assistance and information gathering in countries **Product:** 2 missions per year, contact with the concerned bodies, information-gathering, awareness			
The unit's internal expenses (communications, staff, participation at ACCOBAMS meetings, etc.)			

Work Programme of the BSC (2003-2004)

I. Improvement of the capacity of the Commission network

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
	Enhancing the operational capacity of the Commission	Maintenance of the office and financial management system as well as the improvement of the general administrative practices of the secretariat	BSC-Secretariat	PIU, TACIS	Being estimated
	Enhancement of the commission capacity to conduct and manage practical studies	Prolongation of the activities of the international study group (ISG) - conduct the practical studies to support the decision making process of the BSC. Reporting to the PIU and the BSC.	GEF PIU BSC, Secretariat	ACs and AGs, experts from the region and elsewhere, selected on the basis of scientific merits and experience.	Being estimated, GEF BS project
	Direct involvement in project coordination activities.	Participation in the Joint Project Management Group and in the steering bodies the GEF and TACIS BS Projects. Coordination of joint projects with the EC and other possible partners.	BSC-Secretariat	GEF PIU, PIU TACIS	BSC budget contribution (estimated in other sections), GEF, TACIS project budgets

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
	Capacity building of AG on Information Management. Further development of information strategy; improvement of an information system for the BSC network and BSEP.	Strengthening of AG on Information Management. Amendment of TOR of the AG. Finalisation of the assessment of information needs and agreement on information release and sharing procedures. Maintenance and improvement of BSC PS/GEF PIU intranet, database design and development, improved web presence through design of web page(s), enhancing public outreach, regional networking, extranet, etc.	BSC-Secretariat	GEF PIU, EC DGE, EEA ARENA, JRC	GEF PIU, EC DGE, BSC Secretariat
	Methodological guidance for the Black Sea Institutional and Expert Network	Development of the ToRs of the AGs further; implementation and control of the of the reporting mechanism	BSC-Secretariat	PIU, TACIS	Budgeted in Section II
	Enlargement of the cooperation with other organisations of relevance.	Setting up or strengthening the cooperation arrangements with EC DGE, BSEC, PABSEC, ACCOBAMS, EEA, ICPDR, EU JRC etc.; development and negotiation of Memoranda of Understanding where appropriate.	Permanent Secretariat	BSEC PABSEC ACCOBAMS EEA, ICPDR, etc..	Budgeted in Section II
	Establish joint mechanisms for cooperation between the BSC and the other existing formal river basin commissions in the Black Sea Basin	Further consultations with the Dnipro Project Management Unit	GEF PIU, Secretariat	UNDP-GEF	GEF BS project (+ICPDR, GEF Dnipro project cost sharing)
	Improvement of the reporting process	Initiation the preparation of the five-year reports; Establishment of an expert group Preparation of an indicator based annual report for 2004	BSC PS	EEA, BSERP, EC DGE, Tacis BS Network	
	General coordination	Annual commission Meeting (s)	BSC/secretariat		Commission Budget,

II. Policy Actions

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
•	Further development of harmonized Water Quality Objectives and Water Quality Standards in order to reduce the inputs of pollutants and setting up an appropriate timeframe for their introduction in the environmental management practice of the states	Two joint meetings of AG on Pollution Monitoring and Assessment, LBS and Biodiversity	BSC Secretariat	GEF PIU, Tacis, EEA	GEF PIU, Tacis, BSC budget
		Conduct of studies for further assessment of the inflows, methodology, eco-system response and economic impacts, etc. Establishment of Expert Groups supported by the GEF Project	GEF PIU, Tacis	BSC Secretariat, EEA	Being estimated, GEF PIU, Tacis
•	Implementation of the BS Integrated Monitoring and Assessment Programme (BSIMAP) in compliance with the Bucharest Convention. The programme shall be revised based on GEF project results of pilot surveys and the national monitoring programmes and the principles of the WFD as well. Regional capacity building for development and implementation of the independent quality assurance/control. Approval of the programme for 2005.	Meeting of the Advisory Group on Pollution Monitoring and Assessment- national monitoring authorities, expertise Workshop on the assessment methodologies Compilation with a view to further harmonization of existing quality criteria/assessment standards (relevant for the marine strategy)	BSC Secretariat	GEF PIU, Tacis, EEA	BSC budget, Tacis project, EEA
•	Study on the management of dredged spoils in the BS (Dumping Protocol)	Setting up of an *Ad hoc* Expert group supported by the GEF project on Management of Dredged Spoils; Organisation of workshop with participation of experts from the region and outside, including the Secretariat of the London Convention to identify the approach and issues to amend the existing Dumping Protocol to the Bucharest Convention 1 meeting of the ESAS AG	BSC Secretariat	IMO, GEF PIU London Convention Secretariat (to be invited)	GEF PIU, Tacis, BSC budget ….
•	Control of trans-frontier movement of hazardous waste in the Black Sea area.	Establishment of an Expert Group on trans-frontier movement of hazardous waste in the Black Sea area and elaboration of a draft Protocol to the Bucharest Convention in consultations with relevant convention secretariats (Basel, Barcelona) and with international organisations.	BSC Secretariat	GEF PIU	-
•	Revision of the Regional Guidance on monitoring of the bathing water quality.	Establishment of an Expert Group on revision of the Regional Guidance on monitoring of the bathing water quality. Meeting of representatives of the national health authorities, selected members of the PMA and LBS AGs, WHO, EEA	BSC Secretariat	WHO, EEA, PIU	GEF PIU

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
•	Assessment of the actual pollution inputs (municipal and riverine base don the WFD[20[1]])	Development of Regional guidelines for assessment of the municipal discharges Development of Regional guidelines for the assessment of riverine inputs	BSC Secretariat	GEF PIU, Tacis, UNEP-GPA, ICPDR, GEF Dnipro Project, EEA	GEF PIU, Tacis, ICPDR Commission budget ....
•	Revision of the draft LBS Protocol to the Convention taking into consideration the implications of the EU Water Framework Directive and the guidance of the GPA.	Analyses of the implementation of the current Protocol and needs assessment for its revision; transfer, where appropriate, of the basic principles of the GPA and WFD to the draft amended protocol. Initiation of the process of updating of the Black Sea TDA Establishment of relevant expert groups; Meeting of the AG LBS	BSC Secretariat	National authorities, GEF PIU, UNEP GPA	Being estimated, GEF PIU
•	To finalize the draft text of the Strategy on Biological Diversity and Landscape Protection and prepare a Regional Biodiversity Protection Action Plan	1 meeting of the Advisory Group on the Conservation of Biological Diversity, consolidation of the draft landscape strategy in the draft biodiversity strategy 1 meeting of the ICZM AG 1 meeting AG CBD/ICZM Technical reports on biodiversity and landscape conservation to be used for the finalization of the strategy	BSC Secretariat	GEF PIU, Tacis	Tacis, GEF-PIU being estimated
•	Conservation of the cetaceans in the Black Sea ACCOBAMS sub-region	Performing secretariat functions and sub regional coordination for the implementation of the ACCOBAMS in the Black Sea. Assisting the organisation of the Second Meeting of ACCOBAMS Scientific Committee in Istanbul Initiate establishment of Black Sea Cetaceans Observation Network	BSC Secretariat, ACCOBAMS Secretariat	All relevant conventions	Being estimated, ACCOBAMS, BSC Commission ……
•	Classification of marine habitats	Identification and development of classification of marine habitats; Work on marine habitat mapping 1 meeting of the CBD AG 1 joint meeting of the CBD and FOMLR AGs	BSC PS, EEA	BS Network GEF Tacis	
•	Development of the annexes to the Protocol on the Conservation of the Biological and Landscape Diversity	Establishment of an Expert Group Meetings of the CBD AG	BSC PS	BSERP, Tacis, Secretariats of relevant international conventions	

[20] Procedures for the other sources of pollution inputs will be developed in 2003 - 2005

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
•	Support to the process of concluding the regional Fisheries Convention negotiations, particularly in relationship with the need to protect key habitats.	2 meetings of the re-constituted AG on Fisheries, joint meeting with the AG on the Conservation of Biological Diversity	BSC	National authorities, GEF PIU, BSEC FAO,	GEF PIU, BSC budget ….
•	Increasing the knowledge on the transboundary aspects of the fisheries in the Black Sea	Preparatory work on an assessment of transboundary populations of fish species and their relationship with sensitive habitats and current fishing practices. Establishment of an Expert Group supported by BSERP Meeting of the AG FOMLR.	BSC PS; GEF PIU	FAO,	GEF PIU
•	Implementation of the MoU with the EEA and the proposed work plan under this MoU	Production of a joint report for 2004 and relevant data collection and setting up the process of preparation of the five-year report in compliance with the BS SAP Compilation of list of Black Sea projects and development of mechanisms for integration of scientific data into European and Black Sea regional reporting Ensure regular flow of data between two institutions Testing of shared use of GIS system; organising a working meeting at EEA/GIS Team	BSC PS, EEA	BS Network, GEF, Tacis, EC DGE	
•	To develop the second part of the National and Regional Contingency Plans	Meeting of the Advisory Group on Environmental and Safety Aspects of Shipping- Consultants Maintenance and update of the operational information for the implementation of the Contingency Plan Identification and mapping of the sensitive areas	BSC Secretariat	IMO, BSERP BS Network	$ ….. BSC budget
•	Preventing the introduction of exotic species	Participation in the GLOBALLAST program	BSC PS, ESAS IMO AC	BSERP, BS Network	
•	Finalization of a regional ICZM Strategy.	Finalization of country technical ICZM reports. Finalization of the ICZM Strategy; Compilation of a list of best ICZM practices Establishing cooperation with the European Landscape convention 2 meetings of the ICZM Group.	BSC Secretariat Tacis	GEF PIU, Tacis, BS Network	Being estimated, Tacis project, BSC budget. …..
•	Promote region-wide cooperation for the reduction of pollution input Implementation of the MOU between the BSC and the ICPDR, as agreed on November 26, 2000, Brussels.	Two meetings of the Joint working group between the BSC and the ICPDR Consultative meetings with the ICPDR Executive Secretary and Danube GEF Project CTA Development and submitting a report on the	BSC, Secretariat ICPDR	UNDP-GEF	GEF BS project (+ICPDR cost sharing)

	Area of Work	Activity	Leading Agencies	Partners	Estimated cost
		activities of the JTWG to the BSC (and ICPDR)			
•	Promote region-wide cooperation in the investment sector	Participation in DABLAS Task Force.	BSC Secretariat	EC DGE, ICPDR, GEF PIU	EC DGE, GEF PIU Commission budget ……
•	Involve local and/or regional financial intermediaries (e.g. Black Sea Trade and Development Bank) for financial management and disbursement of small/medium sized bankable projects related to nutrient limitation and habitat restoration.	Identification and subsequent consultations with the possible local and regional financial intermediaries, report	GEF PIU BSC Secretariat	Banking/finance sector	GEF funding
•	Cooperation with other international programmes and organisations, especially in the case observer status is granted to the BSC	Representing the Commission at meetings, conferences, workshops and other fora, presentations, delivering lectures, reports, etc.	BSC Secretariat		EC DGE, GEF PIU, Tacis, Commission budget, others $ …….
•	Introduction of the principles of the EU Water Framework Directive in the Activities of the Commission	Analysis of the implications of the enacting of the Directive. Strengthening of an *ad hoc* working group	BSC Secretariat	ICPDR, EC DGE, Tacis	Tacis, Commission budget, $ ……..
•	Elaboration of the European Marine Strategy	Participation in the IOCF and its working groups	BSC PS	BSERP, Tacis	
•	Strengthening and coordination of the work of national and research institutions in the region.	Preparation for biennial scientific conference for 2005	BSC, GEF PIU,	NATO, BS GOOS scientific community ARENA, etc.	Being estimated, BSC, GEF PIU Commission budget …..
•	Enhancing public awareness of the Bucharest Convention and BS SAP. Increasing the public participation in the Black Sea process.	Support to the NGO community incl. the BSNN for increased involvement in regional aspects of reduction of eutrophication and work on environmental education in schools. Production of a Position Paper on the public access to environmental information and the right to be involved in the decision making process	GEF PIU BSC Secretariat Tacis	NGO community incl. BSNN, ministries of education	GEF PIU Tacis

Appendix D The Black Sea/Danube Strategic Partnership

Introduction

Recognizing that eutrophication is a major ecological threat to the fragile Black Sea ecosystem and that the Danube is a major nutrients source for the Black Sea, Black Sea Commission and the International Commission on the Protection of the Danube River have decided to join efforts in order to reduce nutrient inputs from Danube and protect the Black Sea environment from further degradation. They reconfirm their commitments by signing the Memorandum of Understanding in Brussels, November
2001. In order to facilitate the practical steps of this cooperation the Joint Danube –Black Sea Working Group comprised of the representative of the Secretariats of both Commissions and experts of the highest level of expertise on the related issues has been established.

In order to contribute to the safeguard from further deterioration of the Black Sea ecosystems, targeted at meeting long term and short term goals of the wider Black Sea basins a Memorandum of Understanding between the Commission for the Protection of the Black Sea against pollution and the International Commission for the Protection of the Danube River was signed in Brussels, 26 November 2001.

The Memorandum of Understanding (Appendix C) implements a framework for agreeing on long term and intermediate common goals and providing expertise in addressing these by providing expertise as required. The first meeting of the Black Sea-Danube Joint Technical Group took place in Istanbul
13-14 May at the Permanent Secretariat main office.

Objectives

The main objectives of the working group are within its mandate, to concentrate during the initial phase on technical terms with particular attention to:

- Assessment of inputs of nutrients and other hazardous substances to the Black Sea proper and to the Sea of Azov.
- Developing of a monitoring system including sampling procedures and building up of a common Analytical Quality Assurance system
- Assessment of the ecological status of the Black Sea proper and the Sea of Azov and assurance of comparability of data
- Development of reporting formats for input loads and the assessed ecological status
- Adoption of appropriate measures to limit discharge of nutrients and hazardous substances and to rehabilitate ecosystems while assuring economic development in the region.

Only in a second phase and based on the results obtained from monitoring and analytical assessment, the D-BS-JWG should develop strategies for the limitation of the discharge of nutrients and hazardous substances.

The D-BS-JWG should make its reports to both Commissions, which will take necessary steps to initiate appropriate measures.

Key Issues of the Work Programme of the Joint Technical Working Group

Key Issues of the Work Programme of the Joint Technical Working Group Taking into account that the ICPDR has already developed major tools for monitoring and assessment for water quality control (TNMN, AQC), it has been recognized that the BSC has to deploy special efforts to reach similar conditions of monitoring and emission control in the Black Sea Convention area. Only then, joint reporting as required by the MoU can successfully be implemented. In this context the following key issues for the implementation of a joint work programme have been identified:

List of Activities

No.	Activity	Timeframe
1	Description and assessment of existing monitoring systems in the Black Sea Convention area (institutional responsibilities and data availability at the national and regional levels, etc.)	Nov 2002
2	Development of a regional monitoring programme for the Black Sea Convention area including: a. Monitoring programs for load inputs (riverine, coastal point sources and diffuse sources incl. airborne pollution) b. Monitoring programmes for ecological status in the Black Sea (incl. remote sensing) c. Monitoring programmes for coastal waters in line with the EU Water Framework Directive d. Analytical quality assurance system	Sep 2005
3	Development of ecological status indicators in the Black Sea Convention area	Nov 2002
4	Review methodology and update assessment in the Black Sea Convention area on: a. point and non-point sources of pollution (cause) b. ecological status of the Black Sea incl. eutrophication (effect) c. ecological status of coastal waters taking into account the EU WFD	Method: May 03 Assessment Dec 04
5	Implementation of WFD in coastal waters: Cooperation with the ICPDR River Basin Management Expert Group and the BSC WFD Expert Group to develop methodological approach and guidelines for achieving the good status of coastal waters in the Black Sea	Continuously as required
6	Development and update (when necessary) of reporting format and procedures for the annual report to both commissions on the input loads and assessed ecological status (based on identified indicators) in the Black Sea Convention area	Nov 2002
7	Draft annual report to both commissions in line with procedures set out in #5.	June 2003,
8	Development of reporting format and procedures for periodic reporting (5 years) on measures undertaken for the reduction of nutrients and hazardous substances in the DRB in line with JAP and in the Black Sea Convention area in line with the SAP with particular attention to: a. Implementation of policy measures addressing reduction of nutrients and hazardous substances from diffuse sources of pollution with particular attention to the EU WFD to achieve good status in coastal waters b. Implementation of investment projects addressing reduction of nutrients and hazardous substances from point sources of pollution c. Analysis of results on monitoring of loads and ecological status	June 2004

No.	Activity	Timeframe
	with particular attention to coastal waters	
9	Draft report to both commissions in line with procedures set out in #7	June 2007
10	In relation to the findings, draft recommendations, taking into account the Outputs/results of economic analysis of nutrient reduction measures done under GEF Projects on appropriate measures to limit discharge of nutrients and hazardous substances	As appropriate
11	Develop mechanism for enhancing information sharing on strategic goals and programmes for reduction of nutrients and hazardous substances in the DRB and the Black Sea Convention area.	Continuously

Terms of Reference for the DBS Joint Technical Working Group

1. Scope of the Working Group

The mandate of this 'Joint Technical Working Group' between the Black Sea Commission and the ICPDR is to reinforce the cooperation and to develop appropriate mechanisms for the implementation of the MoU between the BSC and the ICPDR on common strategic goals.

2. Objective of the Working Group

To create a common base of understanding and agreement on the changes over time of the Black Sea ecosystem, and the causes of these changes, and to report to both commissions on the results, recommending strategies and practical measures for remedial actions.

3. Key Activities of the Working Group

- Description and assessment of existing monitoring systems in the Black Sea Convention area (institutional responsibilities and data availability at the national and regional levels, etc.)
- Development of a regional monitoring programme for the Black Sea Convention area.
- Development of ecological status indicators in the Black Sea Convention area.
- Review methodology and update assessment in the Black Sea Convention area.
- Development and update (when necessary) of reporting format and procedures for the annual report to both commissions on the input loads and assessed ecological status (based on identified indicators) in the Black Sea Convention area
- Draft annual report to both commissions in line with procedures set out in #5.
- Development of reporting format and procedures for periodic reporting (5 years) on measures undertaken for the reduction of nutrients and hazardous substances in the DRB in line with JAP and in the Black Sea Convention area in line with the SAP.
- Draft report to both commissions in line with procedures set out in #7.
- In relation to the findings, draft recommendations, taking into account the Outputs/results of economic analysis of nutrient reduction measures done under GEF Projects on appropriate measures to limit discharge of nutrients and hazardous substances.

- Develop mechanism for enhancing information sharing on strategic goals and programmes for reduction of nutrients and hazardous substances in the DRB and the Black Sea Convention area.

4. Definition of the Working Group and its Reporting Obligations

This 'Joint Technical Working Group' will be constituted upon agreement of both the BSC and the ICPDR. The results and recommendations prepared by the Group will serve to provide guidance for decision-making at the level of the Commissions.

All reports of the Joint Technical Working Group will be prepared in line with the work programme and will be submitted to both Commissions for approval and further action and to the GEF.

To fulfil its mandate the Joint Technical Working Group will take into account the strategies and measures of the ICPDR JAP and the BS SAP.

The Working Group activities will be supported by both the Danube and the Black Sea GEF Regional Projects.

5. Composition of the Working Group

The composition of the Joint Technical Working Group is as follows:

For the ICPDR:

1. The Chairman of the MLIM EG (Monitoring, Laboratory and Information Management),
2. The Chairman of the EMIS EG (Emission),
3. Representative of the Permanent Secretariat with expertise in technical and scientific issues;

For the Danube/BS countries (contracting parties to both conventions):

Experts with technical/scientific expertise from Bulgaria, Romania and Ukraine, proposed by both the respective Head of Delegation to the ICPDR and the Black Sea Commission member.

For the Black Sea Commission:

Experts with technical/scientific expertise from Georgia, Russian Federation and Turkey and representatives (3) of the Permanent Secretariat/Advisory Group to the BSC.

For the UNDP-GEF Projects – the Project Manager or his/her representative.

The Working Group may consult other groups and individuals as it deems necessary to carry out its tasks.

Chairmanship – The Joint Technical Working Group will select the Chairman amongst its members. The chairmanship shall alternate on an annual basis between the representatives of the ICPDR and the BSC.

Appendix E Explanatory Note of the BSC/PS

Total BSC and BS countries contributions

The overall budget of the BSC and its Permanent Secretariat comrises the following:

a) BSC PS – annual budget;
b) BSC advisory groups
c) Participating countries
d) Others

Total Contributions

a) BSC PS

Year	2003-2004	2004-2005	2005-2006	Total
Operational BSC Budget, USD	261,360	261,360	261,360	**784,080**

b) BSC PS

Year	2003-2004	2004-2005	2005-2006	Total
Advisory groups, USD	118,000	118,000	118,000	**354,000**

c) Joint activities of the participating countries

Year	2004	2005	2006	Total
Joint activities, USD	0	0	0	**0**

d) Other

Year	2004	2005	2006	Total
European Commission, USD	44,776[21]	44,776	0	**89,552**

Summary Table of the BSC and BS countries contribution

Budget Item	2003-2004	2004-2005	2005-2006	Total
BSC Budget	261,360	261,360	261,360	**784,080**
BSC AGs	118,000	118,000	118,000	**354,000**
Joint Activities	0	0	0	**0**
Others	44,776	44,776		**89,552**
Total	**424,136**	**424,136**	**379,360**	**1,227,632**

[21] The contribution of the EC is Euro 36,000 a year. The exchange rate applied is 1Euro = 1.24378 USD.

Annex A: BSC Budget

Summary of the contributions of the Contracting Parties

	2004	2005	2006
Bulgaria	43,560	43,560	43,560
Georgia	43,560	43,560	43,560
Romania	43,560	43,560	43,560
Russian Federation	43,560	43,560	43,560
Turkey	43,560	43,560	43,560
Ukraine	43,560	43,560	43,560
Total	261,360	261,360	261,360

Budget for the year 2003-2004 (USD)

Contracting Parties	Contribution share (%)	Amounts (USD)
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261,360**
DG AidCo		**Euro 36,000**

Total Expenditure

Operational Costs (USD)	39,360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72,000
Total	**261 360**
Seconded staff by EC DG AidCo	**Euro 36 000**

Budget for the year 2004-2005 (USD)

Contracting Parties	Contribution share (%)	Amounts (USD)
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261,360**
DG AidCo		**Euro 36 000**

Total Expenditure

Operational Costs (USD)	39 360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72 000

Total	**261 360**
Seconded staff by EC DG AidCo	**Euro 36 000**

Budget for the year 2005-2006 (USD)

Contracting Parties	Contribution share (%)	Amounts
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261 360**

Total Expenditure

Operational Costs (USD)	39 360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72 000
Total	**261 360**

Expenditures per Advisory Groups

Advisory Group		2003-2004	2004-2005	2005-2006	Total
AG ESAS	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG FOMLIR	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG PMA	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG ICZM	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**

Advisory Group		2003-2004	2004-2005	2005-2006	Total
AG CBD	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG LBS	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG IM	**Domestic**	5,400	5,400	5,400	**16,200**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	13,400	13,400	13,400	**40,200**
EG WFD	**Domestic**	5,400	5,400	5,400	**16,200**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	13,400	13,400	13,400	**40,200**
Total		**118,000**	**118,000**	**118,000**	**354,000**

Activities	**ESAS**		**FOMLIR**		**PMA**		**ICZM**		**CBD**		**LBS**		**IM**		**WFD**	
Countries	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**	**m-d**	**US$**
Bulgaria	90	2700	30	900	30	900	30	900	30	900	30	900	30	900	30	900
Georgia	30	900	30	900	30	900	30	900	90	2700	30	900	30	900	30	900
Romania	30	900	90	2700	30	900	30	900	30	900	30	900	30	900	30	900
Russia	30	900	30	900	30	900	90	2700	30	900	30	900	30	900	30	900
Turkey	30	900	30	900	30	900	30	900	30	900	90	2700	30	900	30	900
Ukraine	30	900	30	900	90	2700	30	900	30	900	30	900	30	900	30	900
Total	7200		7200		7200		7200		7200		7200		5400		5400	

Calculations are made based on the assumption that the average expenditures in the region and for the time period in question amount to 30 USD/d

The average expenditures for a meeting of an advisory group amount to USD 8,000.

Appendix F Incremental Costs Analysis and Matrix – Costs

Outputs	Baseline Costs (USD)					Alternative Costs (USD)	Incremental Costs (USD)			
	Governments	UNDP	Bilat. Donors	EU	Total Baseline		EuropeAid	BSC	GEF	Total Incremental
1.1 Operational structures and management tools of the Black Sea Commission further developed and functioning.	109,601,559	2,267,805	743,633	2,461,149	115,074,146	116,477,381	570,178	170,538	662,519	1,403,234
1.2 Black Sea Project Implementation Unit of the BSERP is fully operational for implementing Tranche II of the project.	0	0	0	0	0	1,230,800	0	0	1,230,800	1,230,800
Subtotal	**109,601,559**	**2,267,805**	**743,633**	**2,461,149**	**115,074,146**	**117,708,181**	**570,178**	**170,538**	**1,893,319**	**2,634,034**
2.1 Protocol for Land-based Activities (LBA) revised and submitted for national negotiation.	6,439,575	133,244	43,692	144,603	6,761,113	6,843,559	33,500	10,020	38,926	82,446
2.2 Strengthen Integrated Coastal Zone Management in line with EU Directives and promotion of Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.	55,809,646	1,154,777	378,662	1,253,229	58,596,314	59,310,848	290,337	86,839	337,358	714,534
2.3 Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.	34,344,398	710,632	233,023	771,218	36,059,270	36,498,983	178,669	53,439	207,605	439,713
2.4 Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances	35,417,660	732,840	240,304	795,318	37,186,123	37,639,577	184,252	55,109	214,092	453,454

Outputs	Baseline Costs (USD)					Alternative Costs (USD)	Incremental Costs (USD)			
	Governments	UNDP	Bilat. Donors	EU	Total Baseline		EuropeAid	BSC	GEF	Total Incremental
2.5 Policies and legal instruments for pollution reduction for the municipal sector assessed and affordable (cost recovery) technical solutions for municipal wastewater treatment provided for national/local implementation.	26,831,561	555,181	182,049	602,514	28,171,305	28,514,831	139,585	41,749	162,191	343,526
2.6 The Convention on Reponsible fisheries finalised and proposals for fisheries-free zones developed, Preparatory activities on transboundary fish stock assessment completed.	19,318,724	399,731	131,075	433,810	20,283,340	20,530,678	100,501	30,060	116,778	247,339
Subtotal	**178,161,563**	**3,686,405**	**1,208,804**	**4,000,693**	**187,057,465**	**189,338,476**	**926,846**	**277,216**	**1,076,950**	**2,281,011**
3.1 Overall economic analysis carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances	36,490,923	755,047	247,586	819,419	38,312,975	38,780,170	189,836	56,779	220,580	467,195
3.2 Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones submitted to IFIs.	27,904,823	577,389	189,331	626,615	29,298,157	29,655,424	145,169	43,419	168,679	357,267
Subtotal	**64,395,746**	**1,332,436**	**436,917**	**1,446,033**	**67,611,132**	**68,435,594**	**335,004**	**100,198**	**389,259**	**824,462**
4.1 Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) developed for coastal zones and marine ecosystems in creating and introducing operational tools and indicators to evaluate changes over time in the coastal	106,252,980	2,198,519	720,913	2,385,955	111,558,368	112,918,730	552,757	165,328	642,277	1,360,362

and marine environment.										
4.2 Black Sea Information System including tools for GIS, mapping and remote sensing developed to support the activities of the BSC and implementation of the BSSAP.	41,857,235	866,083	283,996	939,922	43,947,236	44,483,136	217,753	65,129	253,018	535,900

Outputs	Baseline Costs (USD)					Alternative Costs (USD)	Incremental Costs (USD)			
	Governments	UNDP	Bilat. Donors	EU	Total Baseline		EuropeAid	BSC	GEF	Total Incremental
4.3 Research Programme designed and implemented to assess input of nutrients and hazardous substance in the Black Sea	145,963,690	3,020,187	990,346	3,277,676	153,251,899	155,120,679	759,343	227,117	882,320	1,868,780
Subtotal	**294,073,905**	**6,084,789**	**1,995,255**	**6,603,553**	**308,757,502**	**312,522,545**	**1,529,853**	**457,573**	**1,777,616**	**3,765,042**
5.1 NGOs structures and activities reinforced though support for institutional development and community actions in awareness raising, training and education[22] on the issues related to the management of nutrients and hazardous substances.	34,344,398	710,632	233,023	771,218	36,059,270	36,498,983	178,669	53,439	207,605	439,713
5.2 Community actions for awareness raising and environmental protection implemented with funding from GEF "Small Grants Programme" targeted specifically at the support/participation in the management of nutrients and hazardous substances	78,348,157	1,621,130	531,583	1,759,341	82,260,210	83,263,306	407,589	121,908	473,598	1,003,095
5.3 Public information on reduction of nutrients and hazardous substances, their effect on the Black Sea ecosystem, and the recovery measures are disseminated to the public at large (i,e, by means of the Communication Strategy, Educational Programme, Public awareness campaigns, media coverage),	30,051,348	621,803	203,895	674,816	31,551,862	31,936,610	156,335	46,759	181,654	384,749
Subtotal	**142,743,903**	**2,953,565**	**968,500**	**3,205,374**	**149,871,342**	**151,698,899**	**742,593**	**222,107**	**862,857**	**1,827,557**
TOTAL	**788,976,676**	**16,325,000**	**5,353,110**	**17,716,802**	**828,371,588**	**839,703,694**	**4,104,474**	**1,227,632**	**6,000,000**	**11,332,106**

[22] Coordinate NGO support with GEF DRP to assure coherence in approach and join resources for NGO support (training, information management, etc.)

Appendix G Letters from the Ministries on Countries' Inputs (pdf file)

Appendix H Logical Frame Matrix – Project Tranche 2 (Objectives, Outputs, Activities, and Outcomes)

Objectives/Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions (A) and Risks (R)
1. Long-term development Objective: The long-term development objective of the proposed Black Sea Recovery Project is to contribute to sustainable human development in the Black Sea area through reinforcing the cooperation and the capacities of the Black Sea countries to take effective measures in reducing nutrients and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s.	**Overall Project Objective:** All Black Sea countries have taken concrete measures (including investment activities) in the eutrophication causing sectors to avoid that discharge of nitrogen and phosphorus (and hazardous substances) to the Black Sea exceed those levels as observed in 1997. The major findings and recommendations of the project have been incorporated in national policies, strategies and, where possible, in national legislation. This will lead to the improvement of the Black Sea ecosystem by decreasing of loads of nutrients and hazardous substances.	• 5-year State of the Environment Reports, with a revised TDA as an annex, of the BSC as from 2004 onwards; • Reports of Danube - Black Sea Joint Technical Working Group, available in 2004 and subsequent years. • Indicator based State of Environment Report (2007) shows the reduction of nutrient and hazardous substances load ultimately reaching the levels not exceeding those observed in 1997,	**R** Low priority for environmental issues; **R** Unfavourable conditions in countries with transitional economies; **R** Political instability in the region; **A** The Black Sea countries will create favourable conditions for investment activities to mitigate nutrient emissions/discharges and pollution by hazardous substances,
2. Overall Objective: The overall objective of the Black Sea Recovery Project is to support participating countries in the development of national policies and legislation and the definition and implementation of priority actions to avoid that discharge of nitrogen and phosphorus to the Black Sea exceed those levels as observed in 1997. This will require countries to adopt strategies and measures that permit economic development whilst ensuring the rehabilitation of coastal and marine ecosystems through pollution control and reduction of nutrients and hazardous substances.	**Objective 1:** At the end of the Project Tranche II, the institutional mechanism of the Black Sea Commission are reinforced and fully operational ensuring cooperation between all Black Sea countries to efficiently implement joint policies and actions and operate common management and control mechanisms;	• Annual report of the BSC Secretariat; • Organisational and operational chart of the BSC • Progress reports from Activity Centres and Advisory Groups.	**A** All Contracting Parties provide financial contributions in time and support national and regional bodies cooperating under the BSC;

Objectives/Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions (A) and Risks (R)
Specific Objective of Tranche II: To reinforce regional cooperation under the Black Sea Convention, to set up institutional and legal instruments and define the priority actions according to the BSSAP at regional and national levels to assure sustainable coastal zone management, the protection of coastal and marine ecosystems and habitats in order to secure sustainable use of coastal and marine resources. To do this, the project will build up on the results of Tranche I. **3. Purpose of the Project:** To support and reinforce the structures and the activities of the Black Sea Commission as well as to reinforce at the national level the development of legal and institutional instruments and investment programmes for pollution control, rehabilitation and sustainable management of coastal and marine ecosystems in providing a framework for coordination, dissemination and replication of successful measures for coastal zone management, protection of habitats and marine ecosystems and sustainable exploitation of resources.	**Objective 2:** Policies and legal and institutional instruments in all Black Sea countries are revised and reinforced to assure sustainable coastal zone and marine resource management while reducing nutrients and hazardous substances though the application and translation into concrete actions of revised policies and legislation in the agricultural, industrial, transport and municipal sectors.	▪ Revised Protocol for Land-based Activities adopted by BSC; ▪ Revised national policies and measures for compliance in the agricultural, industrial, transport and municipal sectors and introduction of BAP and BAT for reduction of nutrients and hazardous substances; ▪ Progress reports on implementation of Pilot Projects for ICZM; ▪ Revised Fisheries Protocol adopted by BSC and ratified by 2006; ▪ Resolution from BSC adopting the document on fisheries-free zones and marine protected areas as Annex to the Protocols of the Bucharest Convention;	**A** LBA Protocol recognised as a useful political tool; **A** Sufficient national support for implementation of pilot projects for ICZM provided; **A** Political commitment existing and financial means sufficient to revise and apply legislation; **R** Missing control and competition between fishermen leading to violation of fishing regulations and of fisheries-free zones.
	Objective 3: Economic analysis in taking into account the principles of EU WFD guidelines is carried out in all Black Sea countries and most cost-effective measures for pollution control and water use are identified and control systems (incl. pollution charges, fines and incentives) are developed and accepted at the national level in the Black Sea counties.	▪ Summary report on socio-economic analysis in all Black Sea countries including evaluation of cost recovery mechanisms for water services; ▪ Effective system for socially acceptable pollution charges, fines and incentives proposed for all Black sea countries; ▪ DABLAS PPC donor conference organised and financial support for 1/3 of prioritised investment projects for municipal, industrial and transport sector obtained.	**A** Reports from DRP for BG, RO and UA available in time; **A** Cooperation from national level and provision of data and information assured; **A** Commitment of IFIs incl. GEF-WB and bilateral donors to support the implementations of investment projects with grants and soft loans.

Objectives/Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions (A) and Risks (R)
	Objective 4: Institutional and organisational mechanisms for transboundary cooperation in water quality monitoring and information management including GIS are established and fully operational at the regional and national level by 2006 to assess water quality and nutrient reduction to the Black Sea; at the same time, results from scientific research on nutrient reduction and eutrophication are available to enhance reporting on the status of the Black Sea.	▪ Periodical reports on Black Sea status based on data and information provided by Black Sea Monitoring and Assessment Programme (BSIMAP) available to the public as a part of the BSC State of Environment Report; ▪ Results of Black Sea surveys and other scientific research projects taken into account to specify indicators for the Black Sea Monitoring Programme; ▪ Web site of Black Sea Information System including GIS and data bank user friendly designed (2005) and fully used by all Black Sea countries;	**A** Timely supply of reliable data from all national monitoring stations; **A** Support provided and Permissions granted by the countries in time to organise Black Sea surveys; **A** Support from all Black Sea countries to establish national information units linked to the Black Sea Information System;
	Objective 5: The civil society and in particular national NGOs in all Black Sea countries are at the end of the Project informed and proactively participating in national programmes for nutrient reduction, coastal zone management and protection of coastal and marine ecosystems.	▪ NGOs are trained and are participating as from 2005 onwards in pilot projects for coastal zone management; ▪ Environmental education is introduced as part of pilot programme in selected schools ; ▪ The GEF Small Grants Programme is fully implemented in 2007 with at least 70% of all projects with sustainable results; ▪ Waste/litter disposal on beaches and shores is reduced through environmental awareness campaigns.	**R** Insufficient technical competence of NGOs; **R** Governments reluctance to work with NGOs; **R** Missing cooperation between NGOs; **R** "Umbrella" NGOs have not sufficient capacities to mobilize sufficient own financial resources.

OBJECTIVE 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 1.1: Operational structures and management tools of the Black Sea Commission further developed and functioning.	1. BS Project Steering Committee continues its operation and meets on a regular basis to follow-up and evaluate BSERP performance; 2. National Coordinating Mechanisms reinforced or set by 2005 in all BS countries; 3. TDA is reviewed by 2005 end and attached as an annex to the State of Environment Report (due in 2007); 4. BSSAP is reviewed by mid 2006. National SAPs are produced by national governments in-line with the revised BSSAP by 2006 end. 5. Advisory Groups operational through logistic support from BSERP (continuous); 6. Work programme of D-BS JTWG fully implemented in 2006 through joint support from BSERP and DRP; 7. Contacts established with the GEF UNDP Dnipro Regional Project,	▪ Progress reports of the Steering Committee; ▪ Final evaluation report on establishment of inter-ministerial coordinating mechanisms in all Black Sea countries; ▪ An annex containing the TDA will appear in the SoE report of the BSC in 2007; ▪ Minutes of the BSC Meeting approving the revised BSSAP ▪ The national documents containing approval of national SAPs; ▪ Expenditures on activities supporting the Permanent Secretariat; ▪ Annual Progress reports of the D-BS JTWG presented to both Commissions; ▪ Modalities of cooperation developed with the GEF/UNDP Dnipro Regional Project.	**R** Insufficient budgetary means of the BSC Secretariat through delayed or omitted payment of contributions and insufficient support from Contracting Parties to the work of national and regional bodies of the BSC; **R** Governments may rely on informal or not specialized coordinating mechanisms; **A** Needed information for TDA is provided and accepted by the countries. **R** Governments are unwilling to provide support/mechanisms for the implementation of national SAPs **R** Insufficient support from national level to the work of the D-BS JTWG.

Activities:

1.1.1 Continue supporting the BS Project Steering Committee to assure regional cooperation and efficient implementation of project activities,

1.1.2 Assist the Black Sea countries to establish or strengthen national coordinating mechanisms to assure nutrient reduction and sustainable management of coastal and marine ecosystems (for Bulgaria, Romania and Ukraine – cooperation with the GEF Danube Regional Project),

1.1.3 Renew the Trans-boundary Diagnostic Analysis on the basis of the activities initiated in Tranche 1,

1.1.4 Review and update the Black Sea Strategic Action Plan (BSSAP)

1.1.5 Provide logistic support to the Black Sea Commission, its Permanent Secretariat and the Advisory Groups (co-ordinated by Regional Activity Centres) to facilitate implementation of the Black Sea Strategic Action Plan (BSSAP) and the project activities,

1.1.6 Support the work of the Danube – Black Sea Joint Working Group, to assure efficient implementation of the MoU and of the related Joint Work Program (Black Sea indicators to demonstrate changes over time in Black Sea ecosystems),

1.1.7 Support the cooperation with the GEF UNDP Dnipro Regional Project.

Continued…

OBJECTIVE 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 1.1: Operational structures and management tools of the Black Sea Commission further developed and functioning.			
Outcomes: 1. BSERP activities are closely linked to the real needs of the riparian countries in the implementation of the Bucharest Convention through timely interventions of the Project Steering Committee established in Tranche 1 2. Nutrient reduction strategies and sustainable management of the marine ecosystems in the counties are strengthened by effective national coordination (inter-ministerial) mechanisms. Inter-Ministerial Coordinating Mechanisms are functioning in at least 2 Black Sea in order to develop, implement and follow up national policies, legislation and projects for nutrient reduction and pollution control. 3. Revised TDA becomes the basis of development of regional and national strategies for reduction of nutrients and hazardous substance until 2010, 4, Regional and National SAPs provide for a coherent logistical implementation of the management of nutrients and hazardous substance in riparian countries and the Black Sea as a whole. 5. Ability of 6 riparian countries to jointly manage the resources of the Black Sea through measures to protect the marine ecosystem led by the BSC and coordinated by the Permanent Secretariat. 6. Joint policy-making framework established and functioning in the Black Sea region (including the Danube River Basin) for reduction of discharges of nutrients and hazardous substances into the Black Sea. The understanding of the impacts from the Danube and the Dnipro to the Black Sea ecosystem is improved and potential risks associated with nutrients and hazardous substances is considerably reduced by 2010.			

OBJECTIVE 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 1.2: Black Sea Project Implementation Unit of the BSERP (BSERP-PIU) fully operational for implementing Tranche II of the Project.	1. Legal and institutional instruments for control of the nutrient and hazardous substances input to the Black Sea from agricultural and municipal sectors in all BS countries improved. Monitoring and coordinating mechanisms of the BSC fully operational by end 2006; 2. Project Support Structures established in the countries and operational starting mid-2004. 3. Activities between BSERP and DRP fully coordinated and jointly implemented where appropriate (continuous); 4. Information exchange with other BS environmental projects and Agencies established and implementation of activities coordinated (continuous); 5. Specific indicators (e.g. process indicators) to demonstrate efficient implementation of project activities applied in GEF project evaluation as from mid 2005 onwards;	▪ Progress reports of the BSERP Steering Group; ▪ Progress reports in line with reporting requirements of the BSERP; ▪ Periodic activity reports from Project Support Structures; ▪ Agreements with DRP on joint project implementation and respective progress reports; ▪ GEF Project evaluation report using specific indicators developed;	**R** Insufficient support from Governments for project implementation due to political or financial constraints and insufficient human capacities; **R** Inadequate adaptation of project objectives and activities to national conditions; **R** Inadequate performance of sub-contractors and/or international consultants; **R** Inadequate professional performance of national consultants proposed by Government and/or no access to information; **A** Countries provide premises and logistical support to the Project Support Structure.

Activities:

1.2.1 Assure efficient implementation of the UNDP-GEF Black Sea Recovery Project (BSERP) with the aim to reinforce and support the activities of the Black Sea Commission,

1.2.2 Further establish and operate the Project Support Structure at national level to facilitate cooperation between the BSREP and the National Commissioners, to provide support to the work of international consultants, to supervise activities of national consultants and to facilitate gathering of information at the national level,

1.2.3 Reinforce cooperation with the DRP and the UNDP/GEF Dnepr Project to efficiently coordinate project activities to avoid duplication of interventions and assure effective use of funds,

1.2.4 Reinforce cooperation with other projects of technical assistance operating in the Black Sea region to assure coordination and complementary of measures (e.g. W.B. Partnership Programme, EU EuropeAid projects, etc.),

1.2.5 Development of indicators for project evaluation with particular attention to process indicators for GEF project evaluation.

Outcomes:

1. The project is implemented according to the programme reaching at least 80% of envisaged tangible results.
2. BSC/PS is efficiently supported through a continuous assistance from the PIU in order to implement the BSC's approved workplan and budget for 2004 (and further).

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.1: Protocol for Land-based Activities (LBA) revised and submitted for national negotiation.	1, Revised Protocol on LBA adopted by BSC and submitted for national negotiation by the end 2004. 2, Protocol signed by countries in 2005?	▪ Resolution of the BSC Meeting on approval of LBA Protocol; ▪ Report from Contracting Parties on results of national negotiation.	**A** Cooperation of all Contracting assured for approval in BSC and in following national negotiation (taking into account that accession countries adopt national legislation in line with EU requirements).
Activities: 2.1.1 Finalise the revision of the LBA Protocol (follow-up activity from Tranche I) and submit to the BSC for approval, 2.1.2 Facilitating the process for national negotiation.			
Outcomes: 1. Revised Protocol becomes a legally binding management document in 2005 used in the activities of the BSC and riparian countries in-line with the EU requirements.			

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.2: Strengthen Integrated Coastal Zone Management in line with EU Directives and promotion of Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.	1. Concepts and guidelines for coastal zone management reviewed by the end 2004 and concepts for national strategies developed for inclusion in the planning at the local level; 2. Outline and work program for Pilot Project for testing of ICZM concept developed by end-2004 and project successfully implemented by end-2006; final evaluation report available by March 2007; 3. Preparation of a pilot project for marine protected area is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for the marine protection; 4. Preparation of a pilot project for restoration and management of wetlands is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for wetland management; 5. ICZM National Focal Points of the BSC are strengthened and supported throughout the Tranche II in all Black Sea countries.	▪ Reviewed concept paper and guidelines for coastal zone management; ▪ Project outline and work program for ICZM Pilot Project; ▪ Progress reports on implementation of ICZM Pilot Project; ▪ Project outline and progress reports on restoration and management of wetlands; ▪ Progress reports on implementation of pilot project for marine protected areas; ▪ Reports of the Advisory Group on ICZM to the Black Sea Commission.	**A** All Black Sea countries will cooperate in adopting and introducing concept of ICZM; **R** Insufficient support from Government and local administration for implementation of Pilot Projects on ICZM, wetlands restoration and protection of marine ecosystems; **R** Insufficient interest and support from private stakeholders and NGOs to cooperate in the implementation of Pilot Projects; **R** Insufficient engagement (financial and human capacity constraints) from national and local Government to support activities of ICZM Centres.

Activities:

2.2.1 Assist in finalizing concept and guidelines for coastal zone management (developed by TACIS Project) and in developing national strategies for ICZM, taking into account principal objectives of the EU WFD and other existing and emerging EU Directives for management of marine ecosystems;

2.2.2 Develop pilot project for testing concept and guidelines for ICZM as developed by BSC/TACIS,

2.2.3 Conceptualise, design and assist in implementing pilot project for restoration and management of wetlands and transitional waters with the aim to enhance nutrient absorption capacities (in association with the WB project[23] in Bulgaria);

2.2.4 Conceptualise, design and assist in implementing pilot project for marine protected areas (e.g. Vama-Veche, in Bulgarian-Romanian trans-boundary zone);

2.2.5 Strengthening of the ICZM National Focal Points of the BSC to implement recommendations and guidelines prepared by pilot projects for coastal zone management and for rehabilitation of coastal wetlands and transitional waters and support efficient management of relevant information and indicator based data on coastal and marine ecosystems in all Black Sea countries.

[23] The World Bank financed project on the wetlands is coordinated by the Ministry of Environment and Water in Bulgaria.

Continued..

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.2: Strengthen Integrated Coastal Zone Management in line with EU Directives and in testing concept for Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.			
Outcomes: 1. The concepts and guidelines for ICZM are incorporated in the national strategies and local planning by 2006 in the riparian countries. 2. A Pilot Project Is Developed For Testing Concept And Guidelines For ICZM As Developed By BSC/TACIS by mid-2005 and implemented within the life-time of the project. 3. The capacity of the BSC to coordinate the ICZM planning process is strengthened through tools and mechanisms developed. 4. National FPs are trained to provide relevant information and indicator-based data on the coastal and marine ecosystems in all Black Sea counties, which will contribute to the effective production of a regular reporting on the state of the environment.			

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.3: Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.	1. Emission Inventory for pollution from agriculture prepared for BG and RO by end 2004 (in cooperation with the DRP), for UA, RU, GE and TR by mid 2005; 2. Report on agricultural policy review and programs for BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP; 3. Inventory on important agrochemicals for RU, GE and TR available by end 2005, based on common methodology developed by DRP; 4. Concepts for introduction of BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP; adoption in national policy and practical application at least in coastal zones expected by end 2006; 5. Concepts for nutrient reduction accepted and application of BAP by Government and stakeholders (farmers associations, NGOs) in the countries through information and training workshops in 2005.	▪ Emission Inventory for agricultural point and non point sources of pollution; ▪ Report on agricultural policy review; ▪ Inventory on important agrochemicals; ▪ Evaluation report on adoption and application of BAT by the Governmental agencies and farmers at national level in 6 Black Sea countries.	**A** Cooperation of Governments in providing necessary information and data assured; **A** Cooperation with the DRP assured for activities in BG, RO and UA, extension of activities in RU, GE, and TR; **A** Preparedness of Government and local administration to revise agricultural policies and to introduce BAP though national extension services (limited financial means and human capacities); **R** Taking into account special know-how, financial and marketing considerations farmers might not adopt BAP without subsidies.

Activities:

2.3.1 Establish Coastal Zone Agricultural Emission Inventory (CAEI) on agricultural point and non point sources of pollution, taking into account emissions of nutrients and hazardous substances in the coastal zones of the Black Sea;

2.3.2 Review relevant agricultural policies, legal instruments and their actual state of enforcement, and identify existing programs for promotion of Best Agricultural Practices (BAP) in Black Sea countries;

2.3.3 Undertake an inventory on important agrochemicals in terms of national production, import and their use (mode of application, misuse and its root causes, environmental impact) and potential for reduction;

2.3.4 Prepare or, where existing, further develop mechanisms for introduction of Best Agricultural Practices in all Black sea countries, taking into account country specific institutional, administrative and economic issues (e.g. incentives);

2.3.5 Organise workshops to disseminate information about best agricultural practices with participants from relevant ministries (e.g. outreach staff from agricultural ministries), agricultural associations (farmers' associations), financing institutions and international agencies (EC, UNDP, WB, bilateral donors, etc) on modalities for introduction of BAPs in Black Sea countries with particular attention to agriculture in coastal zones (Cooperation with GEF DRP in organising workshops in Bulgaria, Romania and Ukraine).

Continued..

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.3: Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.			
Outcomes: 1. The integration of water quality objectives related to agriculture nutrient pollution (i,e, N and P) into agriculture policies increased in 6 Black Sea countries. 2. New agricultural policies for controlling non-point sources of pollution from agriculture accepted by policy makers based on broadly disseminated nation-specific BAP concepts. 3. Agricultural emission/load inventory will contribute to the updating/identifying of key areas for both pollution and biodiversity/sensitive areas as a part of TDA and SAP 3. BAP accepted by farmers in the field in the Black Sea riparian countries. 4. 50 farmers in the Black Sea coastal region aware of and applying best agricultural practices.			

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.4: Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances, and adopted (at least in coastal zones by 2006)	1. Industrial Emission Inventory prepared for coastal zone of all BS countries by the end 2004; 2. Industrial and transport emission related "hot spots" for all BS countries in coastal zone identified and impact evaluated by mid 2005; 3. Analytical report on industrial production involving N and P and hazardous substances in coastal areas of the BS finalised by end 2005; 4. Analytical report on policies and legal and institutional instruments to control industrial pollution with focus on dangerous substances for RU, GE and TR available by end 2005 (BG, RO, and UA under DRP); 5. Concepts for introduction of BAT for industrial and transport sector for RU, GE and TR available by mid 2005; 6. Adoption of BAT in national policy and practical application at least in coastal zones expected by end 2006; 7. Concepts for reduction of nutrients and dangerous substances and for application of BAT are known and accepted by Government officials and stakeholders (industrial and transport firms, NGOs) in RU, GE and TR through information and training workshops organised in 2005.	▪ Report on emission inventory and hot spot analysis; ▪ Study on industrial sources and uses of N and P; ▪ Report on industrial policies and regulations for emissions and storage of waste; ▪ Concept paper for policy change and introduction of BAT; ▪ Evaluation report on introduction of BAT in the industrial sector in Black Sea countries; ▪ Workshop(s) documents.	**A** Cooperation of Governments and industrial private sector in providing necessary information and data; **A** Preparedness of Government and local administration to revise industrial emission standards and to introduce BAT though national advisory services for cleaner industrial technologies (limited financial means and human capacities); **A** Cooperation is established with the GEF DRP for Bulgaria, Romania and Ukraine; BSERP other BS countries. **A** Preparedness of public and private industrial sector to adopt BAT (technological know-how and financial considerations);

Activities:

2.4.1 Establish Coastal Zone Industrial Emission Inventory (CIEI) on industrial and transport (e.g. harbours) activities, taking into account emissions of nutrients and toxic substances in the coastal zones of the Black Sea;

2.4.2 Develop criteria and revise industrial and transport related "hot spots" having a significant impact on coastal waters (recreation resorts, fish spawning areas, etc.); define Significant Impact Areas (SIA) of pollution from industrial and transport activities (analyze cause-effect relationship);

2.4.3 Review policies and relevant existing legislation for industrial pollution control and identify enforcement mechanisms at national level;

2.4.4 Develop appropriate mechanisms for step-by-step introduction of BAT, taking into account regulatory and legal issues, awareness raising, fines, economic incentives, etc.;

2.4.5 Facilitate/ establish networking amongst technical and economic experts and decision makers to exchange information and to promote innovative and environment friendly technologies for reduction of nutrients and hazardous substances (see also Output 4.2);

2.4.6 Organise workshops with participants from relevant ministries, industrial and transport managers, banking institutions, to discuss modalities for introducing BAT, and for obtaining financial support for innovative technologies.

Continued..

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.4: Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances, and adopted (at least in coastal zones by 2006)			
Outcomes: 1. The integration of water quality objectives related to industrial pollution (priority substances according to the Bucharest Convention list) into industrial policy and regulatory framework according to EU Directive on Integrated Pollution and Prevention Control enhanced in 6 Black Sea countries. 2. Priorities for pollution reduction in National Action Programmes revised , based on improved methodology for emissions inventories (reflecting the EU directives requirements on reporting) and on better understanding of cause and effect relationships. 3. Emission inventory and criteria for "hot-spot" will contribute to the updating/identifying of key areas for both pollution and biodiversity/sensitive areas as a part of TDA and SAP.			

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.5: Policies and legal instruments for pollution reduction for the municipal sector assessed and affordable (cost recovery) technical solutions for municipal wastewater treatment provided for national/local implementation.	1. Municipal Emission Inventory prepared for coastal zone of all BS countries by end 2004; 2. Municipal "hot spots" in coastal zone for all BS countries reviewed and impact evaluated by mid 2005; 3. Analytical report on existing legal and institutional instruments to control pollution from urban sources for RU, GE and TR available by end 2005 (based on methodology as applied in Danube countries) and concepts for harmonisation of national laws with EU requirements developed; 4. Mechanisms for compliance with legislation developed and concepts for economic and technical solutions developed for RU, GE and TR by mid 2006 and proposed to Governments for application; 5. Concepts for revision of legislation and practical solutions for municipal wastewater treatment are known and accepted by Government officials and stakeholders (municipalities, waterworks, NGOs) in RU, GE and TR though information and training in workshops organised in 2005.	▪ Report on emission inventory and hot spot analysis; ▪ Report on existing legal and institutional instruments for pollution control from urban sources and proposed harmonization with EU legislation; ▪ Concept paper for introduction of economic and technical solution for compliance with legal requirements in urban wastewater management; ▪ Evaluation report on introduction of regulations and appropriate technologies for urban wastewater treatment in Black Sea countries.	**A** Governments, local administration and municipalities cooperate in providing necessary information and data; **A** ICPDR and EMIS EG provide assistance to develop methodology as applied in Danube countries - Bulgaria, Romania and Ukraine. **R** Limited financial resources and insufficient technological know how will not allow municipalities to introduce appropriate technologies for urban wastewater collection and treatment.

Activities:

2.5.1 Establish basin-wide Coastal Zone Municipal Emission Inventory (CMEI) for agglomerations over 5,000 PE, indicating emissions of BOD/COD, nutrients and toxic substances and compiling information on existing or planned sewer or collector systems and existing or planned WWTP in the coastal zones of the Black Sea;

2.5.2 Develop criteria and identify in the coastal zones municipal "hot spots" having a significant impact on coastal waters, in particular recreation resorts, fish spawning areas, etc. (analyze the cause-effect relationship);

2.5.3 Review relevant existing legal and institutional mechanisms for pollution control from urban sources and propose measures for harmonizing national legislation with the requirements of the EU Urban Wastewater Directive;

2.5.4 Review measures for compliance with national legislation and propose economic (incentives, fines) and technical solutions (appropriate and affordable technologies);

2.5.5 Organise workshops in Black Sea countries with participants from relevant ministries, municipalities and local Government to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management.

Outcomes:

1. Proposals are accepted for national/local policy options to improve collection of water and wastewater service tariffs and fees in all 6 Black Sea countries.

2. Effective mechanisms for identifying "hot-spots" based on the internationally accepted criteria, including the EU WFD, are developed by 2005 end. This will contribute to the updating/identifying of key hot-spots for both pollution and biodiversity/sensitive areas as a part of TDA and SAP.

3. Representatives from relevant ministries, municipalities and local Government are trained in approaches to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management.

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.6[24]: The Convention on Responsible fisheries finalised and proposals for fisheries-free zones developed, Preparatory activities on transboundary fish stock assessment completed.	1. Text of the Convention on Responsible Fisheries developed for presentation to the riparian governments by end 2005 and result on national negotiations reported and taken into account in the document 2. Report on study on sensitive habitats and nursery grounds with recommendations for the establishment of fisheries-free zones and marine protected areas ready by end 2005; 3. Concept paper and outline of study on migrating fish population and nursery grounds available by mid 2005 and search for financial support initiated. 4. Fishermen communities informed and conscious on sustainable fishing practices and fisheries free zones by end 2006; 5. The working plan to develop fisheries free zones is developed in association with the riparian governments by mid 2005,	▪ Resolution of the BCS meeting on the legally binding Document on Fisheries; ▪ Report with recommendations for the establishment of fisheries-free zones and marine protected areas; ▪ Resolution of the BSC meeting on the prepared Annexes on fisheries-free zones and marine protected areas; ▪ Resolution of the BSC meeting on the Concept paper on assessment of migrating fish population and nursery grounds ▪ Information materials on sustainable fishing practices and fisheries-free zones. ▪ A fishery free zone related section in the draft Fisheries Convention	**A** National negotiation process successful to develop legally binding document on Fisheries; **A** BSC reaches agreement in time on Annex for the establishment of fisheries-free zones and marine protected areas; **A** Cooperation with GFCM and FAO assured to provide advice in migratory stock assessment; **R** Financial resources and technical cooperation not available to carry out full-scale stock assessment. **R** Ukraine is unable at the present stage to commit to further international conventions (by Decree)

Activities:

2.6.1 Assist the Black Sea Commission in developing a legally binding document on Fisheries and support the negotiation process at the national level;

2.6.2 Prepare outline and carry out study on sensitive habitats and nursery grounds and prepare recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea with particular focus on the NW Shelf;

2.6.3 Support the preparation of annexes on fisheries-free zones and marine protected areas to be introduced in the Protocol on Protection of Biological and Landscape Diversity of the Bucharest Convention;

2.6.4 Develop concept paper and methodology to reinforce the implementation of the future document on fisheries prepared under 2.6.1 for the assessment of migratory population of fish species and their relationship with sensitive habitats and current fishing practices;

2.6.5 Prepare and implement training and information seminars for the fishermen community on proposed fisheries-free zones and sustainable exploitation of fish resources in the Black Sea;

2.6.6 Working Plan to monitor observance of the fisheries-free zones,

[24] To carry out activities for Output 2.6, contacts shall be established with the General Fisheries Council for the Mediterranean (GFCM) and FAO to provide advice and to participate in relevant meetings and workshops.

Continued..

OBJECTIVE 2: Development of Policy Guidelines, Legal and Institutional Instruments for Pollution Reduction from LBA, and Protection of Ecosystems of the Black Sea and its Coastal Zones			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 2.6[25]: A legally binding document on fisheries and proposals for fisheries-free zones developed, as well as preparatory activities on transboundary fish stock assessment completed.			
Outcomes: 1, The text of the Fisheries Convention on Fisheries is finalised and presented to riparian governments by 2005 end. 2. Recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea are accepted by the BSC and riparian countries and a working plan is implemented in national strategies. 3. Fishing communities in the Black Sea countries are aware of the fishery free zones, as well as of principles of the sustainable exploitation of stocks in-line with national strategies.			

[25] To carry out activities for Output 2.6, contacts shall be established with the General Fisheries Council for the Mediterranean (GFCM) and FAO to provide advice and to participate in relevant meetings and workshops.

OBJECTIVE 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 3.1 Overall economic analysis carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances	1. Guidelines and templates for socio-economic analysis prepared by end 2004 in line with existing methodologies[26]; 2. First national reports on socio-economic analysis available by mid-2005; 3. Consultation and information workshops organised end 2005 to amend and endorse national reports; 4. Second draft of national reports available after workshop; 5. Summary report on socio economic analysis, focusing on coastal zones, including programme of measures for agriculture, industry and urban sectors with cost estimation and selection of most cost-effective solutions available by beginning 2006 and endorsed by BSC Expert Group;	▪ Guidelines and templates for socio-economic analysis; ▪ National reports on socio-economic analysis on the current status of water supply/wastewater legislation; ▪ Summary report on socio economic analysis for costal zones of BS countries including programme of measures with cost estimation and selection of most cost-effective solutions.	**A** Cooperation of Governments, in providing necessary information and data; **A** Preparedness of the Governments and local administrations to implement proposed programme of measures (limited financial means and human capacities); **A** Required information is accessible for international and national experts deployed by the project.

Activities:

3.1.1 Prepare guidelines and templates for the socio-economic analysis for Black Sea countries in applying the methodological approach developed for economic analysis under the EU WFD, and in building on results from Tranche I on root cause analysis of environmental degradation;

3.1.2 Carry our socio-economic analysis at national level and identify significant deficiencies regarding water supply and wastewater legislation, including water pollution charges, fines and incentives);

3.1.3 Organise consultation and information meeting with Government officials, national consultants and other holders of information to explore possibilities for cost recovery for water services;

3.1.4 Summarise results of socio-economic analysis at national level and evaluate the mechanisms for cost recovery for water services in line with EU WFD guidelines;

3.1.5 Prepare summary report on socio-economic situation in Black Sea coastal countries and make judgment about the most cost-effective combination of measures in respect to reduction of nutrients and hazardous substances[27].

[26] Most activities for Bulgaria, Romania and Ukraine accomplished in Phase I of the GEF DRP; same methodology can be applied by the BSERP for Georgia, Russia and Turkey.

[27] This activity can only be carried out when Outputs 2.3, 2.4 and 2.5 as well as 3.2 are available.

Continued..

OBJECTIVE 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 3.1 Overall economic analysis for the Black Sea countries carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances,			
Outcomes: 1. Socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances by mid-2005.			

OBJECTIVE 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 3.2: Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones submitted to IFIs.	1. – 2. Investment programmes developed in line with templates set up for DABLAS data base (ICPDR) by mid 2005 for municipal, industrial and other infrastructural projects for all Black Sea countries (coastal zones) and priorities identified; 2. Potential of local and/or regional financing institutions or intermediaries in RU, GE and TR are actively engaged by mid 2005; 3. Pilot projects related to Public Private Partnerships in RU, GE and TR for agricultural, industrial or municipal sectors are developed by mid 2005 (implementation of the pilot projects is envisaged within a new GEF regional initiative); 4. A Donor Conference for Black Sea coastal zones organised in 2005 in one of the Black Sea countries jointly with the IFIs.(i.e. EBRD/WB/EIB)	▪ Programme with investment projects for the municipal, industrial and transport sectors available in database for consultation and defining of priorities according to chosen indicators; ▪ Report and listing of regional and local banking institutions having capacities to function as intermediaries for project financing; ▪ Report on the Donor Conference.	**R** Necessary information and data might not be obtained from central an local Governments and public and private banking sector **R** Uncertain legal conditions and administrative stumbling block discourage foreign investors to enter private-public partnerships; **A** Cooperation of risk friendly financing institutions and donors to support implementation of investment projects[28];
Activities: 3.2.1 Prepare investment programmes for municipal, industrial and other infrastructural projects in coastal zones of the Black Sea to reduce nutrients and hazardous substances affecting Black Sea waters and coastal ecosystems (in line with guidelines established by the DABLAS-PPC); 3.2.2 Prioritise investment projects at national and regional level in taking into account environmental, economic and financial (bankability) considerations in applying DABLAS prioritisation methodology; 3.2.3 Evaluate the potential of the local and/or regional financial intermediaries (e.g. Black Sea Regional Development Bank) as a means of channelling funds to small/medium sized bankable projects in the Black Sea coastal zone; 3.2.4 Examine opportunities for public-private partnership for investment projects in the Black sea costal zone (e.g., municipal water supply and wastewater treatment, fishing and fish processing, environmental friendly industrial production, e.g. production of phosphate-free detergents, new technologies in organic farming, etc.); 3.2.5 Organise, in cooperation with DABLAS PPC donor conference (IFI and bilateral donors) to mobilize financial support for the implementation of industrial pollution reduction, municipal WWTP and other infrastructural measures to protect coastal waters and ecosystems of the Black Sea.		

[28] Activities to be carried out in line with the DABLAS-PPC requirements.

Continued..

OBJECTIVE 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 3.2: Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones prepared for submission to international funding agencies.			
Outcomes: 1. Investment programmes prepared in line with templates set up for DABLAS data base (ICPDR) by mid 2005 for municipal, industrial and other infrastructural projects for all Black Sea countries (coastal zones) and priorities identified 2. A Donor Conference for Black Sea coastal zones organised in 2005 in one of the Black Sea countries presenting at least 20 small to medium sized priority projects for donor support. 3. Involvement of interaction between the private sector and GEF is further developed in the Black Sea countries (in-line with evolving GEF strategy).			

OBJECTIVE 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 4.1: Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) functioning/ operational for coastal zones and marine ecosystems in creating and introducing operational tools and indicators to evaluate changes over time in the coastal and marine environment.	1. – 2. Black Sea Monitoring Programme based on relevant chemical and biological indicators, fully operational by mid 2005 with full cooperation of national institutions (laboratories) taking into account EU requirements for marine and costal zone monitoring and applying QA/QC procedures; 3. – 4. Monitoring institutions in all BS countries operational, handbook for operation of BSIMAP prepared, staff trained as needed and basic equipment (where necessary) supplied by mid 2005; 5. Pilot project to test monitoring program set up by mid 2005, running test program up to end 2006; 6. Laboratory technicians are familiar with application of SOPs 7. Pilot project to test Black Sea Vessel Traffic Oil Pollution Information System developed by mid-2004 and results available by end 2005.	▪ Indicator based annual reports on Black Sea status including harmonized data from all national monitoring stations; ▪ 5-year State of Environment reports reflecting the load of nutrient (hazardous substance) entering the Black Sea relative to 1997 levels. ▪ Report on monitoring test program and with recommendations to set up full scale monitoring system; ▪ Test results of the VTOPIS.	**R** National monitoring institutions may lack necessary financial means and equipment for sampling and laboratory work; **R** Certain national monitoring institutions may not supply reliable data in time; **R** Financial support might not be available to produce annual summary reports on Black Sea status; **A** Relevant national units of the BSC support the pilot project in their respective countries.

Activities:

4.1.1 Further develop and/or upgrade the BSIMAP including relevant chemical and biological indicators and optimisation of sampling sites, taking into account the main principles of the EU WFD for coastal and transitional waters, the forthcoming EU marine Strategy and other marine monitoring programs currently in use;

4.1.2 Establish and implement QA/QC procedures including inter-institutional calibration exercises for chemical and ecological monitoring and the development of the Standard Operating Procedures (SOP);

4.1.3 Strengthen the capacitates of identified monitoring institutions through staff training as needed for improved ecological monitoring, and provide, where necessary, basic monitoring equipment;

4.1.4 Prepare a complete set of technical documents for the implementation for the operation of the BSIMAP (handbook), building on the results of the corresponding activities from the TACIS project;

4.1.5 Develop pilot projects and carry out testing of the monitoring programme with emphasis on environment status indicators, hazardous substances, spatial coverage and regional scopes;

4.1.6 Organise workshops on application of modern assessment techniques and SOPs;

4.1.7 Design and assist implementing a pilot project within the development of a Black Sea Vessel Traffic Oil Pollution Information System (VTOPIS).

Outcomes:

1. BSIMAP becomes an effective tool for the monitoring and indicator-based assessment of the status and dynamics (including forecasts) of the Black Sea ecosystem by 2007.
2, BSIMAP provides indicator based reporting of the state and trend of the nutrient (and hazardous substances) loading to the Black Sea.
3. Practical tools are developed to demonstrate the effectiveness of VTOPIS in the Black Sea through a pilot project by 2005 end.

OBJECTIVE 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 4.2: Black Sea Information System including tools for GIS, mapping and remote sensing developed to support the activities of the BSC and implementation of the BSSAP.	1. State of the Environment Report (5-year), 2. – 6. Black Sea Information system fully established and operational by mid 2005 within intranet area and for the public access (Internet) and operational units established at national level in all BS countries to facilitate exchange of information and emergency messages; 7. – 8. Black Sea GIS including mapping tools and download of satellite data operational by end 2005 and accessible by all contracting parties and public users; 9. All members of BSC bodies and staff of national operational units or information centres as well as NGO representatives have received training by 2005 to make fully use of the BS Information System.	▪ State of the Environment Reports (5-year); ▪ Web site: www.bserp.org ; ▪ Overview maps of Black Sea Basin used for planning purposes by all Black Sea countries; ▪ Reports from the ICZM Centres to the BSC with all information required for the development of State of the Environment Report.	**R** Black Sea Contracting Parties do not provide in time and quality information needed to compile the Annual status report; **R** Governments may not provide in time required information for production of regional Black Sea maps and other data and information for GIS; **R** BSC might not have sufficient funds to assure sustainable operation and maintenance of the information system;

Activities:

4.2.1 Support the development and the operation of the Black Sea Information System (BSIS), administered at the premises of the BSC/PIU (intranet) and ensure that it is widely used by all Black Sea expert bodies, activity centres and other operational bodies under the Black Sea Commission (these bodies have been supported by BSERP PIU within Tranche 1 and have the required technical capacity to use the system).

4.2.2 Improve reporting formats with user friendly interface to assure coherent and analytical presentation of data and information;

4.2.3 Link all Contracting Parties of the Black Sea Commission to the BSIS, which implies the establishment of operational units at the national level to communicate also in case of accidental emergency situations,

4.2.4 Assure links with regional and global information systems (e.g. SeaSearch, Black Sea GOOS, DANUBIS, Black Sea Database[29], IW:LEARN etc),

4.2.5 Prepare special interactive web sites for public information and response with particular attention to new technologies in the agricultural and in the industrial sectors (BAP/BAT), in urban wastewater treatment, coastal zone management, etc;

4.2.6 Develop and operate the Black Sea GIS including textual, numerical and digital mapping information, appropriate data base and reporting formats,

4.2.7 In cooperation with the Joint Research Centre (JRC) download, interpret and distribute on a regular basis SeaWifs colour scan satellite data, and assure extended use of GIS,

4.2.8 Assist in preparing coherent outline and drafting of the State of the Environment Report, as required by the BS SAP;

4.2.9 Launch training at the national level and organise a series of workshops to train users in the best use of the tools made available by the system (interactive web site, update of database, etc).

[29] This database was developed under the NATO TU-Black Sea Project. It is operated by the METU Institute in Erdemli (Turkey).

Continued..

OBJECTIVE 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 4.2: Black Sea Information System including tools for GIS, mapping and remote sensing developed			
Outcomes: 1. Management of information for the BSC on work to manage the Black Sea basin enhanced for 50 experts involved in the BSC (Secretariat, RACs, FP, experts working groups etc.) by the improvement of the BSIS as evidenced by an expansion of the information available as well as the use of the system. 2. The data exchange and reporting procedures within the implementation of the Bucharest Convention (RACs, FPs, BSC/PS), as well as with the EEA is supported by the BSIS. 3. Increased public awareness of Black Sea problems, issues and solutions (including initiatives of the BSC, NGOs etc.) due to an improved, more user-friendly and interactive BSC and project web sites respectively as evidenced by an increase in hits to the web pages from 500 hits per month in 2003 to 2,000 hits per month in 2006.			

OBJECTIVE 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 4.3: Research Programme designed and implemented to assess input of nutrients and hazardous substance in the Black Sea	1. Results of first survey cruises available during 2005; 2. Funds requested for additional extension of survey cruises to other recognized impact areas; 3. Scientific study on nutrient inputs by atmospheric deposition is concluded by end 2006; 4. Models adapted and tested building up on the results of regional pilot project(s); 5. Report on baseline data on phosphorus in detergents and estimation of transaction costs available end 2004 6. Preparatory documents prepared and Black Sea Conference organised in 2006.	▪ Analytical reports on survey; ▪ Letters of requests and negotiations for additional funding; ▪ Publication on atmospheric deposition of nutrients; ▪ Model in use for the development of a river basin management plan in at least on of the Black Sea countries; ▪ Report on base line data on present use of phosphorus in detergents; ▪ Proceedings of the ISG Black Sea Conference	**R** Government and institutions are reluctant to provide scientific data and information free of charge for various foreseen scientific studies; **A** For extension of research program (surveys cruises) additional funding will be made available;

Activities:

4.3.1 Carry out survey cruises in the Black Sea with special emphasis on impact assessment in the NW Shelf based on existing research programme (Aug/Sept 2004 and Jan. 2005); and identify sources for additional funding to extend present programme to other recognized impact areas of the Black Sea;

4.3.2 Prepare and carry out study on inputs of nutrients to the Black Sea by atmospheric deposition;

4.3.3 Further develop/adapt rapid assessment methodology for diffuse sources in the Black Sea basin (taking into account DANUBS models),

4.3.4 Conducting a study for the use of phosphorus in detergents with the aim to obtain baseline information and evaluation of transaction cost for the Black sea riparian countries;

4.3.5 Prepare and organise scientific Black Sea Conference in 2006 to present and discuss results from all ISG activities including results from surveys and identify further knowledge gaps.

Outcomes:

1. Knowledge on the functioning of the Black Sea ecosystem is improved and results of the target-based research programme are integrated in the decision making process (e.g. setting of realistic water quality objectives, assessment of impacts and their effects, etc.)

OBJECTIVE 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

Outputs	Objectively Verifiable Indicators / Results	Sources of Verification	Assumptions (A) and Risks (R)
Output 5.1: NGOs structures and activities reinforced though support for institutional development and community actions in awareness raising, training and education[30] on the issues related to the management of nutrients and hazardous substances.	1. Set of criteria to evaluate the efficiency of NGO activities in relation to supporting the management of nutrients and hazardous substances developed by end 2004; 2. Optimal operation of Black Sea NGO umbrella organisations is achieved by 2006; 3. Knowledge and awareness on coastal zone management, reduction of nutrients and hazardous substances are improved by mid 2005; 4. NGO publications related to nutrient and hazardous substances, in national languages, are regularly published.	▪ Evaluation report on NGO activities; ▪ Numbers of NGOs and members registered in Umbrella Organisations having observer status in the BSC; ▪ Number of NGOs and members participating in ICZM Pilot Project; ▪ NGO publications, web-sites.	**R** Insufficient professional capacities in NGOs; **R** Low capacities and experience in fund raising; **R** Cooperation between Government and NGOs not productive.

Activities:

5.1.1 Develop criteria and evaluate the effectiveness of NGOs in the support of management of nutrients and hazardous substances within the coastal zone and marine ecosystems (on the basis of Tranche I Small Grants Programme) and design programme for the implementation of 5.1.2 - 5.1.4,

5.1.2 Provide support to the "Umbrella" NGOs through capacity building in form of regional consultation meetings and reinforcement of communication and information management (NGO website),

5.1.3 Organise stakeholder training in environmental protection of coastal areas (with emphasis on nutrient and hazardous substances) and protection of marine ecosystems as part of the Train Sea Coast programme,

5.1.4 Support the production and distribution of NGO publications in national languages on nutrient reduction and hazardous substances.

Outcomes:

1. Community involvement increased through an expanded and strengthened network (5 times increase of NGOs involved within the life-time of the project) to undertake awareness raising and pollution reduction activities in 6 Black Sea countries;
2. Sustainable operation of the "Umbrella NGOs" achieved, leading the further expansion and effectiveness of the network;
3. Active involvement of the "Umbrella NGOs" members in policy development and pollution reduction activities assured through partnerships with the national governments (e.g. activities to involve the public in the Management/Planning process in the frame of the EU Water Framework Directive etc.)
4. The Black Sea Day will continue to be an annual event and a platform to raise awareness on control of nutrients and hazardous substances in riparian countries.
5. BSC/PS has become a public oriented institution through enhanced quality of communication and by using awareness raising tools and sustainable means of communication (including periodic ones) and the web-page.

OBJECTIVE 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 5.2: Community actions for awareness raising and environmental protection implemented with funding from GEF "Small Grants Programme" targeted specifically at the support/participation in the management of nutrients and hazardous substances	1. Evaluation report on results of 1st tranche of SGM is available in mid 2004 and recommendations are taken into account for implementing 2nd tranche of SGP; 2. – 3. Based on experience of 1st tranche, methodology and procedures are prepared and selection of projects for implementing 2nd tranche of SGP is achieved by end 2004; 4. Efficient and effective NGO involvement in coastal zone management and pollution control is assured through good organisation and careful follow up of SGP implementation (end 2004 to end 2006) according the set of criteria developed in Output 5,1. 5. Evaluation report on implementation of 2nd tranche of SGP is available beginning 2007.	▪ Evaluation report on 1st tranche of SGP; ▪ Developed methodology and list of approved projects for financial support in 2nd tranche; ▪ Final evaluation report on performance in project implementation and efficiency of results produced.	**R** Insufficient professional capacities in NGOs to reach expected results; **R** Inefficient management and use of funds; **R** Insufficient reporting skills, **R** Missing cooperation from local administration or Government;

Activities:

5.2.1 Evaluate results of the first tranche of community based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluation firm;

5.2.2 Define type of projects eligible for GEF SGP support and develop methodology and procedures for selection of projects, follow up of programme implementation and final evaluation of results,

5.2.3 For second tranche, identify, in line with above methodology, projects for reduction of nutrients and hazardous substances in the frame of coastal zone management and protection of marine ecosystems (The Black Sea Environmental Education Programme, BSEEP);

5.2.4 Assure efficient implementation and follow up of GEF SGP in Black Sea coastal areas through subcontracting experienced firm or organisation;

5.2.5 Evaluate results of the second tranche of community-based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluator.

Outcomes:

1, Awareness of nutrient pollution and hazardous substance problems in the Black Sea basin and involvement of the Black Sea communities in 6 countries enhanced via 15-20 national small grant funded projects led by national environmental NGOs;
2. NGOs play a significant role at the national/local level to ensure effective consultative mechanisms between the local/national governments and a wider public.

OBJECTIVE 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 5.3: Public information on reduction of nutrients and hazardous substances, their effect on the Black Sea ecosystem, and the recovery measures are disseminated to the public at large (i.e., by means of the Communication Strategy, Educational Programme, Public awareness campaigns, media coverage),	1. Decision makers of public and private sector, opinion leaders and the general public are better informed and sensitised on issues related to coastal zone management and protection of coastal and marine ecosystems (continuous until end of the BSERP); 2. Sufficient and reliable information for mass media purposes are prepared and published (continuous until end of the BSERP); 3. Environmental education in schools is introduced through BSC/BSERP initiative by mid 2006; 4. Funding sources for the documentary film are identified by end 2005 and it is produced by 2007. 5. – 6. Basin-wide information material on management of coastal zones and marine ecosystems, reduction of nutrients and toxics, sustainable fisheries, etc., are periodically published and presented on interactive web site for public information and response (continuous until end of BSERP); 7. Evaluation of communication strategy and awareness raising activities is completed by 3/2007.	▪ Mid term evaluation in Project Progress report; response in interactive web site; ▪ Articles from newspapers, journals, broadcasts etc, ▪ School education curriculum ▪ Documentary film on environmental protection of the Black Sea; ▪ Posters, leaflets, film clips etc. produced; ▪ Evaluation report on communication strategy based on regional questionnaire.	**R** Weak or non existing Government response to translate messages in national languages and to participate in awareness raising campaigns; **A** The script developed in Tranche I is supported by the potential sponsors of the film production; **A** NGOs may play an important role if financial incentives will be provided.

Activities:

5.3.1 Conceptualise and implement in line with Communication Strategy developed in Tranche I, public information and awareness raising campaigns on sustainable sectoral management for control of nutrients and hazardous substance in the coastal zone for protection of coastal and marine ecosystems in all Black Sea countries (to be translated in national languages by Governmental department or NGO concerned),

5.3.2 Develop and produce, in line with Communication Strategy, materials for public press and mass media on subjects related to management of coastal zones and marine ecosystems (with focus on eutrophication and sustainable fisheries),

5.3.3 Support environmental education in schools through the development and introduction of specific messages for nutrient reduction and sustainable management of the coastal zone and marine ecosystems (through the Black Sea Environmental Education Programme, BSEEP),

5.3.4 Encourage the production of a popular documentary film on the Black Sea environmental protection with a positive message on eutrophication (based on the script developed in Tranche I and identify relevant sources for financial support),

5.3.5 Assist in developing and producing information material on management of coastal zones and marine ecosystems (with focus on eutrophication), reduction of nutrients and hazardous substances, recovery of Black Sea ecosystems, sustainable fisheries, etc.

5.3.6 Prepare interactive web site for public information and response (see also Activity 4.2.5);

5.3.7 Evaluate at the end of the GEF BSERP the effects and impact of public information and awareness raising campaigns.

Continued..

OBJECTIVE 5: Strengthening of public participation in environmental protection through access to information, stakeholder traini ng and awareness raining and implementation of community actions (Small Grants Programme)			
Outputs	**Objectively Verifiable Indicators / Results**	**Sources of Verification**	**Assumptions (A) and Risks (R)**
Output 5.3: Public information and awareness for environmental issues reinforced through special publications and cooperation with mass media to disseminate information on nutrient reduction and sustainable coastal zone management and protection of marine ecosystems.			
Outcomes: 1 Awareness of public in overall Black Sea on the importance of pollution reduction and environmental challenges has been enhanced through targeted communication activities and campaigns (farmers, municipalities, wetland mangers, environmental NGOs, etc.)			

Appendix I Detailed Breakdown of Phase II Budget for All Categories and Per Objectives and Activities

Table 29 Detailed Breakdown of Phase II Budget for All Categories and Per Objectives and Activities

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention	**510,600**	**406,600**	**0**	**83,000**	**0**	**63,000**	**21,000**	**43,600**	**300,000**	**100,000**	**200,000**
Output 1.1: Operational structures and management tools of the Black Sea Commission further developed and functioning.	**$510,600**	*$406,600*	*$0*	*$83,000*	*$0*	*$63,000*	*$21,000*	*$43,600*	*$300,000*	*$100,000*	*$200,000*
1.1.1 Continue supporting the BS Project Steering Group to assure regional cooperation and efficient implementation of project activities	**$30,000**	$0		$30,000					$0		
1.1.2 Assist the Black Sea countries to establish or strengthen national coordinating mechanisms to assure nutrient reduction and sustainable management of coastal and marine ecosystems	**$45,600**	$23,600		$18,000		$20,000	$4,000	$3,600	$0		
1.1.3 Renew the Trans-boundary Diagnostic Analysis on the basis of the activities initiated in Tranche 1	**$100,000**	$90,000				$25,000	$10,000	$15,000	$50,000	$50,000	
1.1.4 Review and update the Black Sea Strategic Action Plan (BSSAP)	**$100,000**	$93,000				$18,000	$7,000	$25,000	$50,000	$50,000	
1.1.5 Provide logistic support to the Black Sea Commission, its Permanent Secretariat and the Advisory Groups (co-ordinated by Regional Activity Centres) to facilitate implementation of the Black Sea Strategic Action Plan (BSSAP) and the project activities	**$200,000**	$200,000							$200,000		$200,000
1.1.6 Support the work of the Danube – Black Sea Joint Working Group, to assure efficient implementation of the MoU and of the related Joint Work Program	**$30,000**	$0		$30,000					$0		
1.1.7 Support the cooperation with the GEF UNDP	**$5,000**	$0		$5,000					$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Dnipro Regional Project											
Output 1.2: Black Sea Project Implemen-tation Unit of the Istanbul Commission (BS-PIU) fully operational for implementing Phase II of the BSERP.	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
1.2.1 Assure efficient implementation of the UNDP-GEF Black Sea Recovery Project (BSERP) with the aim to reinforce and support the activities of the Black Sea Commission	**$0**	$0							$0		
1.2.2 Further establish and operate the Project Support Structure at national level to facilitate cooperation between the BSREP and the National Commissioners, to provide support to the work of international consultants, to supervise activities of national consultants and to facilitate gathering of information at the national level	**$0**	$0							$0		
1.2.3 Reinforce cooperation with the DRP and the UNDP/GEF Dnepr Project to efficiently coordinate project activities to avoid duplication of interventions and assure effective use of funds	**$0**	$0							$0		
1.2.4 Reinforce cooperation with other projects of technical assistance operating in the Black Sea region to assure coordination and complementary of measures	**$0**	$0							$0		
1.2.5 Development of indicators for project evaluation with particular attention to process indicators for GEF project evaluation	**$0**	$0							$0		
Objective 2: Development of policy guidelines, legal and institutional instruments for nutrient reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones	**830,000**	**590,000**	**20,000**	**130,000**	**0**	**30,000**	**90,000**	**320,000**	**240,000**	**240,000**	**0**
Output 2.1: Protocol for Land-based Activities (LBA) in Black Sea countries ratified and taken into account in national legislation.	**$30,000**	**$20,000**	**$0**	**$10,000**	**$0**	**$0**	**$0**	**$0**	**$20,000**	**$20,000**	**$0**
2.1.1 Finalise the revision of the LBA Protocol (follow-up activity from Phase I) and submit to the BSC for approval	**$20,000**	$20,000							$20,000	$20,000	

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
2.1.2 Facilitating the process for national negotiation	**$10,000**	$0		$10,000							

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contract, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 2.2: Strengthen Integrated Coastal Zone Management in line with EU Directives and promotion of Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.	**$260,000**	**$210,000**	**$20,000**	**$10,000**	**$0**	**$0**	**$20,000**	**$130,000**	**$80,000**	**$80,000**	**$0**
2.2.1 Assist in finalizing concept and guidelines for coastal zone management (developed by TACIS Project) and in developing national strategies for ICZM, taking into account principal objectives of the EU WFD and other existing and emerging EU Directives for management of marine ecosystems	**$85,000**	$80,000		$5,000				$50,000	$30,000	$30,000	
2.2.2 Develop pilot project for testing concept and guidelines for ICZM as developed by BSC/TACIS	**$70,000**	$60,000					$10,000	$40,000	$20,000	$20,000	
2.2.3 Conceptualise, design and assist in implementing pilot project for restoration and management of wetlands and transitional waters with the aim to enhance nutrient absorption capacities (in association with the WB project in Bulgaria)	**$80,000**	$70,000					$10,000	$40,000	$30,000	$30,000	
2.2.4 Conceptualise, design and assist in implementing pilot project for marine protected areas (e.g. Vama -Veche, in Bulgarian-Romanian trans-boundary zone)	**$5,000**	$0		$5,000					$0		
2.2.5 Strengthening of the ICZM National Focal Points of the BSC to implement recommendations and guidelines prepared by pilot projects for coastal zone management and for rehabilitation of coastal wetlands and transitional waters and support efficient management of relevant information and indicator based data on coastal and marine ecosystems in all Black Sea countries	**$20,000**	$0	$20,000						$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 2.3: Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.	**$160,000**	**$110,000**	**$0**	**$30,000**	**$0**	**$0**	**$20,000**	**$60,000**	**$50,000**	**$50,000**	**$0**
2.3.1 Establish Coastal Zone Agricultural Emission Inventory (CAEI) on agricultural point and non point sources of pollution, taking into account emissions of nutrients and hazardous substances in the coastal zones of the Black Sea	**$35,000**	$20,000		$10,000			$5,000	$10,000	$10,000	$10,000	
2.3.2 Review relevant agricultural policies, legal instruments and their actual state of enforcement, and identify existing programs for promotion of Best Agricultural Practices (BAP) in Black Sea countries	**$25,000**	$20,000					$5,000	$10,000	$10,000	$10,000	
2.3.3 Undertake an inventory on important agrochemicals in terms of national production, import and their use (mode of application, misuse, environmental impact) and potential for reduction	**$25,000**	$20,000					$5,000	$10,000	$10,000	$10,000	
2.3.4 Prepare or, where existing, further develop mechanisms for introduction of Best Agricultural Practices in all Black sea countries, taking into account country specific institutional, administrative and economic issues (e.g. incentives)	**$35,000**	$30,000					$5,000	$20,000	$10,000	$10,000	
2.3.5 Organise workshops to disseminate information about best agricultural practices with participants from relevant ministries (e.g. outreach staff from agricultural ministries), agricultural associations (farmers' associations), financing institutions and international agencies (EC, UNDP, WB, bilateral donors, etc) on modalities for introduction of BAPs in Black Sea countries with particular attention to agriculture in	**$40,000**	$20,000		$20,000				$10,000	$10,000	$10,000	

coastal zones											

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 2.4: Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances	**$165,000**	**$120,000**	**$0**	**$30,000**	**$0**	**$0**	**$15,000**	**$60,000**	**$60,000**	**$60,000**	**$0**
2.4.1 Establish basin-wide Coastal Zone Industrial Emission Inventory (CIEI) on industrial and transport (e.g. harbors) activities, taking into account emissions of nutrients and toxic substances in the coastal zones of the Black Sea;	**$30,000**	$20,000		$10,000				$10,000	$10,000	$10,000	
2.4.2 Develop criteria and revise industrial and transport related "hot spots" having a significant impact on coastal waters (recreation resorts, fish spawning areas, etc.); define Significant Impact Areas (SIA) of pollution from industrial and transport activities (analyse cause-effect relationship)	**$20,000**	$20,000						$10,000	$10,000	$10,000	
2.4.3 Review policies and relevant existing legislation for industrial pollution control and identify enforcement mechanisms at national level	**$27,500**	$20,000					$7,500	$10,000	$10,000	$10,000	
2.4.4 Develop appropriate mechanisms for step-by-step introduction of BAT, taking into account regulatory and legal issues, awareness raising, fines, economic incentives, etc	**$20,000**	$20,000						$10,000	$10,000	$10,000	
2.4.5 Develop concept for networking amongst technical and economic experts and decision makers to exchange information and to promote innovative and environment friendly technologies for reduction of nutrients and hazardous substances	**$27,500**	$20,000					$7,500	$10,000	$10,000	$10,000	
2.4.6 Organise workshops with participants from relevant ministries, industrial and transport managers, banking institutions, to discuss modalities for introducing BAT,	**$40,000**	$20,000		$20,000				$10,000	$10,000	$10,000	

and for obtaining financial support for innovative technologies											

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 2.5: Policies and legal instruments for pollution reduction for the municipal sector assessed and affordable (cost recovery) technical solutions for municipal wastewater treatment provided for national/local implementation.	**$125,000**	**$80,000**	**$0**	**$30,000**	**$0**	**$0**	**$15,000**	**$50,000**	**$30,000**	**$30,000**	**$0**
2.5.1 Establish basin-wide Coastal Zone Municipal Emission Inventory (CMEI) for agglomerations over 5,000 PE, indicating emissions of BOD/COD, nutrients and toxic substances and compiling information on existing or planned sewer or collector systems and existing or planned WWTP in the coastal zones of the Black Sea	**$27,500**	$17,500		$10,000				$10,000	$7,500	$7,500	
2.5.2 Develop criteria and identify in the coastal zones municipal "hot spots" having a significant impact on coastal waters, in particular recreation resorts, fish spawning areas, etc. (analyse the cause-effect relationship)	**$25,000**	$17,500					$7,500	$10,000	$7,500	$7,500	
2.5.3 Review relevant existing legal and institutional mechanisms for pollution control from urban sources and propose measures for harmonizing national legislation with the requirements of the EU Urban Wastewater Directive	**$17,500**	$17,500						$10,000	$7,500	$7,500	
2.5.4 Review measures for compliance with national legislation and propose economic (incentives, fines) and technical solutions (appropriate and affordable technologies)	**$25,000**	$17,500					$7,500	$10,000	$7,500	$7,500	
2.5.5 Organise workshops in Black Sea countries with participants from relevant ministries, municipalities and local Government to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management	**$30,000**	$10,000		$20,000				$10,000	$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 2.6: The Convention on Responsible fisheries finalised and proposals for fisheries-free zones developed, Preparatory activities on transboundary fish stock assessment completed.	**$90,000**	**$50,000**	**$0**	**$20,000**	**$0**	**$30,000**	**$20,000**	**$20,000**	**$0**	**$0**	**$0**
2.6.1 Assist the Black Sea Commission in developing a legally binding document on Fisheries and support the negotiation process at the national level	**$25,000**	$9,000		$6,000		$5,000	$10,000	$4,000	$0		
2.6.2 Prepare outline and carry out study on sensitive habitats and nursery grounds and prepare recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea with particular focus on the NW Shelf	**$15,000**	$9,000		$6,000		$5,000		$4,000	$0		
2.6.3 Support the preparation of annexes on fisheries-free zones and marine protected areas to be introduced in the Protocol on Protection of Biological and Landscape Diversity of the Bucharest Convention	**$14,000**	$9,000				$5,000	$5,000	$4,000	$0		
2.6.6 Working Plan to monitor observance of the fisheries-free zones											
2.6.4 Develop concept paper and methodology to reinforce the implementation of the future document on fisheries prepared under 2.6.1 for the assessment of migratory population of fish species and their relationship with sensitive habitats and current fishing practices	**$9,000**	$9,000				$5,000		$4,000	$0		
2.6.5 Prepare and implement training and information seminars for the fishermen community on proposed fisheries-free zones and sustainable exploitation of fish resources in the Black Sea	**$27,000**	$14,000		$8,000		$10,000	$5,000	$4,000	$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procur e-ment	Meetings	Publi- cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems	**$300,000**	**$165,000**	**0**	**90,000**	**0**	**30,000**	**45,000**	**65,000**	**70,000**	**70,000**	**0**
Output 3.1 Overall economic analysis carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances	**$170,000**	**$115,000**	**$0**	**$30,000**	**$0**	**$0**	**$25,000**	**$45,000**	**$70,000**	**$70,000**	**$0**
3.1.1 Prepare guidelines and templates for the socio-economic analysis for Black Sea countries in applying the methodological approach developed for economic analysis under the EU WFD, and in building on results from Phase I on root cause analysis of environmental degradation	**$26,000**	$26,000						$12,000	$14,000	$14,000	
3.1.2 Carry our socio-economic analysis at national level and identify significant deficiencies regarding water supply and wastewater legislation, including water pollution charges, fines and incentives)	**$60,000**	$35,000		$10,000			$15,000	$21,000	$14,000	$14,000	
3.1.3 Organise consultation and information meeting with Government officials, national consultants and other holders of information to explore possibilities for cost recovery for water services	**$24,000**	$14,000		$10,000					$14,000	$14,000	
3.1.4 Summarise results of socio-economic analysis at national level and evaluate the mechanisms for cost recovery for water services in line with EU WFD guidelines	**$14,000**	$14,000							$14,000	$14,000	
3.1.5 Prepare summary report on socio-economic situation in Black Sea coastal countries and make judgment about the most cost-effective combination of measures in respect to reduction of nutrients and hazardous substances	**$46,000**	$26,000		$10,000			$10,000	$12,000	$14,000	$14,000	

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 3.2: Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones submitted to IFIs.	**$130,000**	**$50,000**	**$0**	**$60,000**	**$0**	**$30,000**	**$20,000**	**$20,000**	**$0**	**$0**	**$0**
3.2.1 Prepare investment programmes for municipal, industrial and other infrastructural projects in coastal zones of the Black Sea to reduce nutrients and hazardous substances affecting Black Sea waters and coastal ecosystems (in line with guidelines established by the DABALS -PPC)	**$35,000**	$15,000		$10,000		$10,000	$10,000	$5,000	$0		
3.2.2 Prioritise investment projects at national and regional level in taking into account environmental, economic and financial (bankability) considerations in applying DABALS prioritisation methodology	**$25,000**	$15,000				$10,000	$10,000	$5,000	$0		
3.2.3 Evaluate the potential of the local and/or regional financial intermediaries (e.g. Black Sea Regional Development Bank) as a means of channelling funds to small/medium sized bankable projects in the Black Sea coastal zone	**$10,000**	$10,000				$5,000		$5,000	$0		
3.2.4 Examine opportunities for public-private partnership for investment projects in the Black sea costal zone (e.g., municipal water supply and wastewater treatment, fishing and fish processing, environmental friendly industrial production, e.g. production of phosphate-free detergents, new technologies in organic farming, etc.)	**$10,000**	$10,000				$5,000		$5,000	$0		
3.2.5 Organise, in cooperation with DABLAS PPC donor conference (IFI and bilateral donors) to mobilize financial support for the implementation of industrial pollution reduction, municipal WWTP and other infrastructural measures to protect coastal waters and ecosystems of the Black Sea	**$50,000**	$0		$50,000					$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention	**1,370,000**	**895,000**	**270,000**	**125,000**	**0**	**50,000**	**80,000**	**105,000**	**740,000**	**200,000**	**540,000**
Output 4.1: Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) developed for coastal zones and marine ecosystems in creating and introducing operational tools and indicators to evaluate changes over time in the coastal and marine environment.	**$495,000**	**$310,000**	**$120,000**	**$35,000**	**$0**	**$0**	**$30,000**	**$40,000**	**270,000**	**$170,000**	**$100,000**
4.1.1 Further develop and/or upgrade the BSIMAP including relevant chemical and biological indicators and optimisation of sampling sites, taking into account the main principles of the EU WFD for coastal and transitional waters, the forthcoming EU marine Strategy and other marine monitoring programs currently in use	**$39,000**	$29,000					$10,000	$9,000	$20,000	$20,000	
4.1.2 Establish and implement QA/QC procedures including inter-institutional calibration exercises for chemical and ecological monitoring and the development of the Standard Operating Procedures (SOP)	**$79,000**	$59,000					$20,000	$9,000	$50,000	$50,000	
4.1.3 Strengthen the capacitates of identified monitoring institutions through staff training as needed for improved ecological monitoring, and provide, where necessary, basic monitoring equipment	**$89,000**	$9,000	$60,000	$20,000				$9,000	$0		
4.1.4 Prepare a complete set of technical documents for the implementation for the operation of the BSIMAP (handbook), building on the results of the corresponding activities from the TACIS project	**$14,000**	$14,000						$4,000	$10,000	$10,000	
4.1.5 Develop pilot projects and carry out testing of the monitoring pro gramme with emphasis on environment status indicators, hazardous substances, spatial coverage and regional scopes	**$165,000**	$100,000	$60,000	$5,000					$100,000		$100,000

4.1.6 Organise workshops on application of modern assessment techniques and SOPs	**$19,000**	$9,000		$10,000				$9,000	$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
4.1.7 Design and assist implementing a pilot project within the development of a Black Sea Vessel Traffic Oil Pollution Information System (VTOPIS)	**$90,000**	$90,000							$90,000	$90,000	
Output 4.2: Black Sea Information System including tools for GIS, mapping and remote sensing developed to support the activities of the BSC and implementation of the BSSAP.	**195,000**	**$95,000**	**$60,000**	**$30,000**	**$0**	**$20,000**	**$10,000**	**$45,000**	**$30,000**	**$0**	**$30,000**
4.2.1 Support the development and the operation of the Black Sea Information System (BSIS), administered at the premises of the BSC/PIU (intranet) and ensure that it is widely used by all Black Sea expert bodies, activity centers and other operational bodies under the Black Sea Commission, as well as accessible to the public (internet)	**$45,000**	$10,000	$20,000	$5,000			$10,000	$10,000	$0		
4.2.2 Improve reporting formats with user friendly interface to assure coherent and analytical presentation of data and information	**$1,000**	$1,000						$1,000	$0		
4.2.3 Link all Contracting Parties of the Black Sea Commission to the BSIS, which implies the establishment of operational units at the national level to communicate also in case of accidental eme rgency situations	**$23,000**	$3,000	$20,000					$3,000	$0		
4.2.4 Assure links with regional and global information systems (e.g. SeaSearch, Black Sea GOOS, DANUBIS, Black Sea Database , etc)	**$7,000**	$7,000				$5,000		$2,000	$0		
4.2.5 Prepare special interactive web sites for public information and response with particular attention to new technologies in the agricultural and in the industrial sectors (BAP/BAT), in urban wastewater treatment, coastal zone management, etc	**$2,000**	$2,000						$2,000	$0		
4.2.6 Develop and operate the Black Sea GIS including textual, numerical and digital mapping information, appropriate data base and reporting formats	**$50,000**	$25,000	$20,000	$5,000		$15,000		$10,000	$0		

Objective ly Verifiable Indicators	Total	Contracts 7+9+10	Procure-ment	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
4.2.7 In cooperation with the Joint Research Centre (JRC) download, interpret and distribute on a regular basis Sea Wifs colour scan satellite data, and assure extended use of GIS	**$40,000**	$40,000						$10,000	$30,000		$30,000
4.2.8 Assist in preparing coherent outline and drafting of the State of the Environment Report, as required by the BS SAP	**$5,000**	$5,000						$5,000	$0		
4.2.9 Launch training at the national level and organize a series of workshops to train users in the best use of the tools made available by the system (interactive web site, update of database, etc)	**$22,000**	$2,000		$20,000				$2,000	$0		
Output 4.3: Research Programme designed and implemented to assess input of nutrients and hazardous substance in the Black Sea	**680,000**	**$490,000**	**$90,000**	**$60,000**	**$0**	**$30,000**	**40,000**	**$20,000**	**$440,000**	**$30,000**	**$410,000**
4.3.1 Carry out survey cruises in the Black Sea with special emphasis on impact assessment in the NW Shelf based on existing research programme (Aug/Sept 2004 and Jan. 2005); and identify sources for additional funding to extend present programme to other recognized impact areas of the Black Sea	**$380,000**	$300,000	$50,000				$30,000		$300,000	$30,000	$270,000
4.3.2 Prepare and carry out study on inputs of nutrients to the Black Sea by atmospheric deposition	**$150,000**	$100,000	$40,000	$10,000					$100,000		$100,000
4.3.3 Further develop/adapt rapid assessment methodology for diffuse sources in the Black Sea basin (taking into account DANUBS models)	**$50,000**	$40,000		$10,000					$40,000		$40,000
4.3.4 Conducting a study for the use of phosphorus in detergents with the aim to obtain baseline information and evaluation of transaction cost for the Black sea riparian countries	**$35,000**	$30,000				$20,000	$5,000	$10,000	$0		
4.3.5 Prepare and organise scientific Black Sea Conference in 2006 to present and discuss results from all ISG activities including results from surveys and identify further knowledge gap	**$65,000**	$20,000		$40,000		$10,000	$5,000	$10,000	$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure -ment	Meetings	Publi- cations	Intern. Experts	Travel Exp.	Nationa l Experts	Sub- Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)	**665,000**	**475,000**	**0**	**5,000**	**160,000**	**35,000**	**25,000**	**10,000**	**430,000**	**40,000**	**390,000**
Output 5.1: NGOs structures and activities reinforced though support for institutional development and community actions in awareness raising, training and education on the issues related to the management of nutrients and hazardous substances.	**$160,000**	**$95,000**	**$0**	**$0**	**$60,000**	**$15,000**	**$5,000**	**$0**	**$80,000**	**$40,000**	**$40,000**
5.1.1 Develop criteria and evaluate the effectiveness of NGOs in the support of management of nutrients and hazardous substances within the coastal zone and marine ecosystems (on the basis of Tranche I Small Grants Programme) and design programme for the implementation of 5.1.2 - 5.1.4	**$20,000**	$15,000				$15,000	$5,000		$0		
5.1.2 Provide support to the "Umbrella" NGOs and the Black Sea Environmental Education Programme (BSEEP) through capacity building in form of regional consultation meetings and reinforcement of communication and information management (NGO website),	**$40,000**	$40,000							$40,000		$40,000
5.1.3 Organise stakeholder training in sustainable coastal zone management (reduction of nutrients and toxics substances) and protection of marine ecosystems as part of the Train Sea Coast programme,	**$40,000**	$40,000							$40,000	$40,000	
5.1.4 Support the production and distribution of NGO publications in national languages related to the project objectives.	**$60,000**	$0			$60,000				$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Procure -ment	Meetings	Publi- cations	Intern. Experts	Travel Exp.	Nationa l Experts	Sub- Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 5.2: Community actions for awareness raising and environmental protection implemented with funding from GEF "Small Grants Programme" targeted specifically at the support/participation in the management of nutrients and hazardous substances	**365,000**	**$360,000**	**$0**	**$0**	**$0**	**$10,000**	**$5,000**	**$0**	**$350,000**	**$0**	**$350,000**
5.2.1 Evaluate results of the first tranche of community based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluation firm;	**$2,500**	$2,500				$2,500	$0		$0		
5.2.2 Define type of projects eligible for GEF SGP support and develop methodology and procedures for selection of projects, follow up of programme implementation and final evaluation of results,	**$2,500**	$2,500				$2,500			$0		
5.2.3 For second tranche, identify, in line with above methodology, projects for reduction of nutrients and hazardous substances in coastal area,	**$350,000**	$350,000							$350,000		$350,000
5.2.4 Assure efficient implementation and follow up of GEF SGP in Black Sea coastal areas through subcontracting experienced firm or organisation ,	**$0**	$0							$0		
5.2.5 Evaluate results of the second tranche of community based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluation.	**$10,000**	$5,000				$5,000	$5,000		$0		

Objectively Verifiable Indicators	Total	Contracts 7+9+10	Proc	Meetings	Publi-cations	Intern. Experts	Travel Exp.	National Experts	Sub-Contracts, 11 + 12	Intern. Companies	National Companies
1	2	3	4	5	6	7	8	9	10	11 <<<	12 <<<
Output 5.3: Public information on reduction of nutrients and hazardous substances, their effect on the Black Sea ecosystem, and the recovery measures are disseminated to the public at large (i.e. by means of the Communication Strategy, Educational Programme, Public awareness campaigns, media coverage)	**$140,000**	**$20,000**	**$0**	**$5,000**	**100,000**	**$10,000**	**15,000**	**$10,000**	**$0**	**$0**	**$0**
5.3.1 Conceptualise and implement in line with Communication Strategy developed in Phase I, public information and awareness raising campaigns on sustainable coastal zone management and protection of coastal and marine ecosystems in all Black Sea countries (to be translated in national languages by Governmental department or NGO concerned)	**$55,500**	$3,000			$50,000	$3,000	$2,500		$0		
5.3.2 Develop and produce, in line with Communication Strategy, materials for public press and mass media on subjects related to management of coastal zones and marine ecosystems (with focus on eutrophication and sustainable fisheries), reduction of nutrients and toxic substances, and recovery of Black Sea ecosystems	**$0**	$0							$0		
5.3.3 Support environmental education in schools through the development and introduction of specific messages for nutrient reduction and sustainable management of the coastal zone and marine ecosystems (the Black Sea Environmental Education Programme, BSEEP)	**$65,500**	$13,000			$50,000	$3,000	$2,500	$10,000	$0		
5.3.4 Encourage the production of a popular documentary film on the Black Sea environmental protection based on the script developed in Phase I and identify relevant sources for financial support	**$10,000**	$0		$5,000			$5,000		$0		
5.3.5 Assist in developing and producing information material on management of coastal zones and marine ecosystems (with focus on eutrophication), reduction of nutrients and hazardous substances, recovery of Black Sea ecosystems, sustainable fisheries, etc.	**$0**	$0							$0		$0
5.3.6 Prepare interactive web site for public information (see also Activity 4.2.5)	**$0**	$0						$0	$0		

Appendix J Project Management Sheets for Phase II

PROJECT MANAGEMENT SHEET

Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention

Output: 1.1 Operational structures and management tools of the Black Sea Commission further developed and functioning.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)[31]	Indicative Time Frame
1.1.1 Continue supporting the BS Project Steering Group to assure regional cooperation and efficient implementation of project activities,	Continuous	- Continued cooperation with the members of the BS Project Steering Group - Conduct regular meetings of the BS Project SG	BS Project Steering Group continues its operation and meets on a regular basis to follow-up and evaluate BSERP performance;	BSC, BSC Permanent Sec., BSERP, UNDP, UNOPS, GEF	CTA, MEIS/DPM	2 Q 2004-3 Q 2006
1.1.2 Assist the Black Sea countries to establish or strengthen national coordinating mechanisms to assure nutrient reduction and sustainable management of coastal and marine ecosystems	Planned for Phase 2	- Cooperation with the GEF Danube Regional Project (for related activities to be undertaken in Bulgaria, Romania and Ukraine). - Extension of inter-ministerial model to Georgia, Russia and Turkey	National Coordinating Mechanisms reinforced or set by 2005 in all BS countries;	BSC, ICPDR, BSERP, DRP	CTA, MEIS/DPM	2 Q 2004 – 2 Q 2007
1.1.3 Renew the Trans-boundary Diagnostic Analysis on the basis of the activities initiated in Tranche 1	Planned for Phase 2	- Data collection exercise was initiated in Tranche 1 - Contract concluded with GIWA	Renewed TDA to become an annex to the SoE report of the BSC	BSC, BSC Permanent Sec., BSERP, GIWA	CTA, MEIS/DPM	1Q 2005 – 2 Q 2006
1.1.4 Review and update the Black Sea Strategic Action Plan (BSSAP)	Planned for Phase 2	None	BSSAP updated	BSC, BSC Permanent Sec., BSERP,	CTA, MEIS/DPM	3Q 2005 – 4 Q 2006
1.1.5 Provide logistic support to the Black Sea Commission, its Permanent Secretariat and the Advisory Groups (co-ordinated by Regional Activity Centres) to facilitate implementation of the Black Sea Strategic Action Plan (BSSAP) and the project activities	Continuous	- Identify workplan of the BSC, PS and AGs - Logistic arrangements	Advisory Groups operational through logistic support from BSERP (continuous);	BSC Permanent Sec., BSERP, RACS, AGs, FPs	CTA, MEIS/DPM	2 Q 2004 – 2 Q 2007
1.1.6 Support the work of the Danube – Black Sea Joint Working Group, to assure efficient implementation of the MoU and of the related Joint Work Program	Continuous	- Implement joint working program and evaluate results - Further organize regular meetings of joint WG	Work programme of D-BS JTWG fully implemented in 2006 through joint support from BSERP and DRP;	BSC, ICPDR, BSERP, DRP	CTA, MEIS/DPM	2 Q 2004 – 2 Q 2007
1.1.7 Support the cooperation with the GEF UNDP Dnipro Regional Project	Planned for Phase 2	- Maintain working relations with other river commissions - Plan together joint activities	Contacts established with all BS river basin commissions	BSC, ICPDR, BSC Permanent Sec, BSERP, DRP Dnipro	CTA, MEIS/DPM	2 Q 2004 – 2 Q 2007

				Regional Project		

PROJECT MANAGEMENT SHEET

Objective 1: Supporting the consolidation and operation of institutional mechanism for cooperation under the Black Sea Convention

Output: 1.2 Black Sea Project Implementation Unit of the Istanbul Commission (BS-PIU) fully operational for implementing Phase II of the BSERP.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
1.2.1 Assure efficient implementation of the UNDP-GEF Black Sea Recovery Project (BSERP) with the aim to reinforce and support the activities of the Black Sea Commission	Continuous	- Permanent contacts and cooperation with the members of the BS Project Steering Group - Organise regular meetings of the BS Project SG	Legal and institutional instruments in all BS countries improved to reach EU or international standards and monitoring and coordinating mechanisms of BSC fully operational by end 2006	BSC, BSC Permanent Sec., BSERP, UNDP, UNOPS, GEF	CTA, MEIS/ DPM	2 Q 2004 – 2 Q 2007
1.2.2 Further establish and operate the Project Support Structure at national level to facilitate cooperation between the BSREP and the National Commissioners, to provide support to the work of international consultants, to supervise activities of national consultants and to facilitate gathering of information at the national level	Support structure initiated in later stages of Phase 1. Project offices created and equipment provided. country team (CTL) and secretarial support nominated and contracted for each country.	- Ensure each country office has full compliment of staff required to support project activities	Project Support Structures established in the countries and operational starting mid-2004.	BSERP, CTLs, BSC, BSC Permanent Secretariat, International and local consultants	CTA, MEIS/ DPM	2 Q 2004 – 2 Q 2007
1.2.3 Reinforce cooperation with the DRP and the UNDP/GEF Dnepr Project to efficiently coordinate project activities to avoid duplication of interventions and assure effective use of funds	Planned for Phase 2	- Organise regular meetings of the joint working groups	Activities between BSERP and DRP fully coordinated and jointly implemented where appropriate (continuous)	BSC, ICPDR, BSC Permanent Sec, BSERP, DRP Dnipro Regional Project	CTA, MEIS/ DPM	2 Q 2004 – 2 Q 2007
1.2.4 Reinforce cooperation with other projects of technical assistance operating in the Black Sea region to assure coordination and complementary of measures	Continuous liaison with EU donor support in the region (TACIS/EuropeAid)	- Initiate liaison of donors to coordinate activities in the region - Exchange of information between donors	Information exchange with other BS environmental projects and Agencies established and implementation of activities coordinated (continuous)	BSC, ICPDR, BSC Permanent Sec, BSERP, DRP	CTA, MEIS/ DPM	2 Q 2004 – 2 Q 2007
1.2.5 Development of indicators for project evaluation with particular attention to process indicators for GEF project evaluation	Project evaluation and process indicators selected in line with the DRB	- Develop process indicators - Agree with GEF/UNDP/BSC - Provide internal and external review of project based on selected indicators	Specific indicators (e.g. process indicators) to demonstrate efficient implementation of project activities applied in GEF project evaluation as from mid	BSC, ICPDR, BSC/PS, BSERP, DRP Dnipro Regional, internat. consultant	CTA, MEIS/ DPM	2 Q 2004 – 2 Q 2007

			2005 onwards			

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.1 Protocol for Land-based Activities (LBA) revised and submitted for national negotiation

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.1.1 Finalise the revision of the LBA Protocol (follow-up activity from Phase I) and submit to the BSC for approval	-Consultation meeting held with stakeholders - questionnaire provided for national consultation to determine needs for updated Protocol. - preparation of a policy paper	-Present the policy paper and technical recommendations to a technical meeting of the BSC (or more than one if needed) during first year of Phase 2. -Involve representatives and technical advisers selected by the Commissioners. -Complete a draft revised Protocol for submission to the Commission.	Revised Protocol on LBA adopted by BSC and submitted for national negotiation by the end 2004	UNEP, BSC, BSC Permanent Sec, EU, BSERP, LBS AG and FPs	CTA, EE	3 Q 2004 – 1 Q 2005
2.1.2 Facilitating the process for national negotiation	Planned for Phase 2	-Conduct a formal process of governmental review, approval and ratification according to the rules and procedures of the Commission itself. -Assure a cooperation of all Contracting parties for approval of the LBA Protocol by the BSC and in following national negotiation (taking into account that accession countries adopt national legislation in line with EU requirements	Report from Contracting Parties on results of national negotiation.		CTA	1 Q 2005 – 2 Q 2007

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.2 Strengthen Integrated Coastal Zone Management in line with EU Directives and promotion of Best Practices for ICZM as developed by BSC/TACIS, to assure reduction of nutrients and hazardous substances from coastal areas into the Black Sea.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.2.1 Assist in finalizing concept and guidelines for coastal zone management (developed by TACIS Project) and in developing national strategies for ICZM, taking into account principal objectives of the EU WFD and other existing and emerging EU Directives for management of marine ecosystems	Planned for Phase 2	-Develop national strategies for ICZM, taking into account principal objectives of the EU WFD and other existing and emerging EU Directives for management of marine ecosystems. -Strengthen of the ICZM National Focal Points of the BSC (equipment and training)	Concepts and guidelines for coastal zone management reviewed by the end 2004 and concepts for national strategies developed	BSC, BSC Permanent Sec, BSERP, ICZM AG EuropeAid, International and local consultants,	EE	3 Q 2004 – 1 Q 2005
2.2.2 Develop pilot project for testing concept and guidelines for ICZM as developed by BSC/TACIS	Planned for Phase 2	- Proposal on pilot project	Outline and work program for Pilot Project for testing of ICZM concept developed by end-2004 and project successfully implemented by end-2006; final evaluation report available by March 2007;		EE	1 Q 2005 – 2 Q 2007
2.2.3 Conceptualise, design and assist in implementing pilot project for restoration and management of wetlands and transitional waters with the aim to enhance nutrient absorption capacities (in association with the WB project in Bulgaria)	Planned for Phase 2	- Proposal on concept and design of the pilot project -Selection of project implementation organization - Assistance with implementation of pilot project - Further dissemination of the pilot project results	Preparation of a pilot project for marine protected area is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for the marine protection		EE	1 Q 2005 – 1 Q 2007

Output: 2.2 (Continued)

Activities	Status at the End of Phase I	Implementati on Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.2.4 Conceptualise, design and assist in implementing pilot project for marine protected areas (e.g. Vama - Veche, in Bulgarian-Romanian trans-boundary zone)	Planned for Phase 2	- Proposal on concept and design of the pilot project -Selection of project implementation organization - Assistance with implementation of pilot project - Further dissemination of the pilot project results	Preparation of a pilot project for restoration and management of wetlands is Finalised by Dec 2004 and implementation successfully started demonstrating new concepts for wetland management	BSC, BSC Permanent Sec, BSERP, ICZM AG, FOMLR AG, International and local consultants	EE	3 Q 2004 - 1 Q 2005
2.2.5 Strengthening of the ICZM National Focal Points of the BSC to implement recommendations and guidelines prepared by pilot projects for coastal zone management and for rehabilitation of coastal wetlands and transitional waters and support efficient management of relevant information and indicator based data on coastal and marine ecosystems in all Black Sea countries	Planned for Phase 2	- Provide appropriate assistance to the ICZM NFPs of the BSC - Support to the ICZM NFPs to create data management centres for timely reporting of agreed indicators	ICZM National Focal Points are strengthened and supported throughout the Phase 2 in all Black Sea countries	BSC, BSC Permanent Sec, BSERP, ICZM AG, International and local consultants	EE	1 Q 2005 – 1 Q 2006

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.3 Agricultural sector policy reviewed and concepts of BAP proposed for application at national level to assure reduction of nutrients and other hazardous substances from agricultural point and non point sources or pollution in coastal areas of the Black Sea.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.3.1 Establish Coastal Zone Agricultural Emission Inventory (CAEI) on agricultural point and non point sources of pollution, taking into account emissions of nutrients and hazardous substances in the coastal zones of the Black Sea	Planned for Phase 2	- Data collection by FPs of LBS/ICZM Advisory groups - Data entry in BSIS	Emission Inventory for BS coastal countries prepared for BG and RO by end 2004 (in cooperation with the DRP), for UA, RU, GE and TR by mid 2005	BSC, BSC Permanent Sec, BSERP, DRB, LBS IDE AGs national Ministries of Agriculture, International and local consultants,	MEIS/ DPM, EE	3 Q 2004 -1 Q 2005
2.3.2 Review relevant agricultural policies, legal instruments and their actual state of enforcement, and identify existing programs for promotion of Best Agricultural Practices (BAP) in Black Sea countries	Planned for Phase 2	- Analyze results and formulate recommendations on appropriate use of agricultural policies and legal instruments - Coordinate promotion of the BAP in the BS countries	Report on agricultural policy review and programs for BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP	BSC, BSC Permanent Sec, BSERP, LBS IDE Ags, national reps. From Ministries of Agriculture and environment, WB-APCP, International and local consultants	HO-EU,EE	3 Q 2004 -1 Q 2005
2.3.3 Undertake an inventory on important agrochemicals in terms of national production, import and their use (mode of application, misuse, environmental impact) and potential for reduction	Planned for Phase 2	- Data collection by FPs of LBS and ICZM as well s collection by appropriate stakeholders - Data entry in BSIS	Inventory on important agrochemicals for RU, GE and TR available by end 2005, based on common methodology developed by DRP		EE	3 Q 2004 -1 Q 2005
2.3.4 Prepare or, where existing, further develop mechanisms for introduction of Best Agricultural Practices in all Black sea countries, taking into account country specific institutional, administrative and economic issues (e.g. incentives)	Planned for Phase 2	-National stakeholder assessment of response to the introduction of BAP - Develop agreed mechanisms for introduction of Best Agricultural Practices in all Black sea countries	Concepts for introduction of BAP for RU, GE and TR available by end 2005 based on common methodology developed by DRP; adoption in national policy and practical application at least in coastal zones expected by end 2006		EE, HO-EU	3 Q 2005 – 1 Q 2007

Output: 2.3 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.3.5 Organise workshops to disseminate information about best agricultural practices with participants from relevant ministries (e.g. outreach staff from agricultural ministries), agricultural associations (farmers' associations), financing institutions and international agencies (EC, UNDP, WB, bilateral donors, etc) on modalities for introduction of BAPs in Black Sea countries with particular attention to agriculture in coastal zones	Planned for Phase 2	-Workshops on BAP implemented; - Appropriate workshops outcomes broadly disseminated	Concepts for nutrient reduction and application of BAP known and accepted by Government and stakeholders (farmers associations, NGOs) in the countries through information and training workshops in 2005	BSC, BSC Permanent Sec, BSERP, IFIs, UNDP, EC, WB – APCP, national reps from Ministries of Agriculture and environment	EE, HO-EU, MEIS/ DPM	1 Q 2005 – 1 Q 2006

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.4 Policies and legislation for application of BAT in the industrial and transport sectors reviewed and proposed for national adoption to assure reduction of nutrients (N and P) and dangerous substances

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.4.1 Establish basin-wide Coastal Zone Industrial Emission Inventory (CIEI) on industrial and transport (e.g. harbors) activities, taking into account emissions of nutrients and toxic substances in the coastal zones of the Black Sea;	Planned for Phase 2	- Data collection by FPs of LBS/ICZM Advisory groups - Data entry in BSIS	Industrial Emission Inventory prepared for coastal zone of all BS countries by the end 2004	BSC Permanent Sec, BSERP, DRB, LBS, ICZM and IDE Ags, national reps. from local government, International and local consultants	MEIS/ DPM, EE	3 Q 2004 – 1 Q 2005
2.4.2 Develop criteria and revise industrial and transport related "hot spots" having a significant impact on coastal waters (recreation resorts, fish spawning areas, etc.); define Significant Impact Areas (SIA) of pollution from industrial and transport activities (analyse cause-effect relationship)	Planned for Phase 2	- Conduct international review of criteria for designation of SIAs in the coastal and marine waters of the Black Sea - Select appropriate criteria together with the BSCs Ags - prioritise national hotspots according to agreed criteria -review the impact of prioritised pollution sources on the environmental status of the marine environment - Carry out identification of Significant Impact Areas	1. Industrial and transport emission related "hot spots" for all BS countries in coastal zone identified and impact evaluated by mid 2005 2. Analytical report on industrial production involving N and P and hazardous substances in coastal areas of the BS finalised by end 2005	BSC, BSC Permanent Sec, BSERP, LBS, ICZM and FOLMR Ags, International consultants	EE	1 Q 2005 – 1 Q 2006
2.4.3 Review policies and relevant existing legislation for industrial pollution control and identify enforcement mechanisms at national level	Planned for Phase 2	- Review appropriate policies - Analyze results and formulate recommendations on appropriate use of industrial policies and legal instruments	Analytical report on policies and legal and institutional instruments to control industrial pollution with focus on dangerous substances for RU, GE and TR available by end 2005 (BG, RO, and UA under DRP)	BSC Permanent Sec, BSERP, LBS, ICZM and IDE Ags, national reps. from local government, International and local consultants	HO-EU	1 Q 2005 – 1 Q 2006

Output: 2.4 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.4.4 Develop appropriate mechanisms for step-by-step introduction of BAT, taking into account regulatory and legal issues, awareness raising, fines, economic incentives, etc	Planned for Phase 2	-Identify and evaluate appropriate implementation concepts for incorporation of water policies and regulations into the national BAT frameworks	Concepts for introduction of BAT for industrial and transport sector for RU, GE and TR available by mid 2005		HO-EU, EE	1 Q 2006 – 1 Q 2007
2.4.5 Develop concept for networking amongst technical and economic experts and decision makers to exchange information and to promote innovative and environment friendly technologies for reduction of nutrients and hazardous substances	Planned for Phase 2	- Meeting of technical, economic and governmental stakeholders - Prepare concept paper for modality of communication for stakeholders in respect to information exchange and BAT - National dissemination and consultation - Establish agreed model for networking	Adoption of BAT in national policy and practical application at least in coastal zones expected by end 2006	BSC Permanent Sec, BSERP, LBS, ICZM and IDE Ags, ad hoc economic expert group, national reps. from local government, International and local consultants	MEIS/ DPM , EE	1 Q 2006 – 1 Q 2007
2.4.6 Organise workshops with participants from relevant ministries, industrial and transport managers, banking institutions, to discuss modalities for introducing BAT, and for obtaining financial support for innovative technologies	Planned for Phase 2	- Organise and conduct national workshops on incorporation of water policies and regulations into the BAT framework	Concepts for reduction of nutrients and dangerous substances and for application of BAT are known and accepted by Government officials and stakeholders (industrial and transport firms, NGOs) in RU, GE and TR through information and training workshops organised in 2005	BSC Permanent Sec, BSERP, ICZM Ag, regional IFIs, national reps. from local government, International and local consultants	EE	1 Q 2006 – 1 Q 2007

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.5 Policies and legal instruments for pollution reduction for the municipal sector assessed and affordable (cost recovery) technical solutions for municipal wastewater treatment provided for national/local implementation.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.5.1 Establish basin-wide Coastal Zone Municipal Emission Inventory (CMEI) for agglomerations over 5,000 PE, indicating emissions of BOD/COD, nutrients and toxic substances and compiling information on existing or planned sewer or collector systems and existing or planned WWTP in the coastal zones of the Black Sea	Planned for Phase 2	- Data collection by FPs of LBS/ICZM Advisory groups - Data entry in BSIS	Municipal Emission Inventory prepared for coastal zone of all BS countries by end 2004	BSC/PS, BSERP, DRB, LBS, ICZM and IDE Ags, national reps. from local government and municipalities, International and local consultants	MEIS/ DPM, EE	3 Q 2004 – 1 Q 2005
2.5.2 Develop criteria and identify in the coastal zones municipal "hot spots" having a significant impact on coastal waters, in particular recreation resorts, fish spawning areas, etc. (analyse the cause-effect relationship)	Planned for Phase 2	-Conduct international review of criteria for designation of significant impact areas in the coastal and marine waters of the Black Sea - Select appropriate criteria together with the BSCs Ags - prioritise national hotspots according to agreed criteria -review the impact of prioritised pollution sources on the environmental status of the marine environment	Municipal "hot spots" in coastal zone for all BS countries reviewed and impact evaluated by mid 2005	BSC, BSC/PS, BSERP, DRB, LBS, ICZM, FOMLR Ags, representatives from local government and municipalities, International and local consultants	EE	1 Q 2005 – 1 Q 2006
2.5.3 Review relevant existing legal and institutional mechanisms for pollution control from urban sources and propose measures for harmonizing national legislation with the requirements of the EU Urban Wastewater Directive	Planned for Phase 2	- Analyze results and formulate proposal on harmonization of national legislation with EU UWD	Analytical report on existing legal and institutional instruments to control pollution from urban sources for RU, GE and TR available by end 2005 (based on methodology as applied in Danube countries) and concepts for harmonisation of national laws with EU requirements developed		HO-EU	1 Q 2005 – 1 Q 2006

Output: 2.5 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.5.4 Review measures for compliance with national legislation and propose economic (incentives, fines) and technical solutions (appropriate and affordable technologies)	Planned for Phase 2	- conduct national reviews - analyze results and formulate proposal on economic and technical solutions in respect of pollution control from urban sources	Mechanisms for compliance with legislation developed and concepts for economic and technical solutions developed for RU, GE and TR by mid 2006 and proposed to Governments for application	BSC, BSC/PS, BSERP, DRB, LBS, ICZM, FOMLR Ags, representatives from local government and municipalities, International and local consultants	EE	1 Q 2006 – 1 Q 2007
2.5.5 Organise workshops in Black Sea countries with participants from relevant ministries, municipalities and local Government to develop and/or updated legislation and to introduce affordable technical solutions for municipal wastewater management	Planned for Phase 2	- Organise national workshops for all relevant stakeholders	Concepts for revision of legislation and practical solutions for municipal wastewater treatment are known and accepted by Government officials and stakeholders (municipalities, waterworks, NGOs) in RU, GE and TR though information and training in workshops organised in 2005		EE	1 Q 2005 – 1 Q 2007

PROJECT MANAGEMENT SHEET

Objective 2: Development of policy guidelines, legal and institutional instruments for pollution reduction from LBA, and protection of ecosystems of the Black Sea and its coastal zones

Output: 2.6 [32] The Convention on Responsible fisheries finalised and proposals for fisheries-free zones developed, Preparatory activities on transboundary fish stock assessment completed.

Activities	Status at End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
2.6.1 Assist the Black Sea Commission in developing a legally binding document on Fisheries and support the negotiation process at the national level	Planned for Phase 2	-Facilitation of meetings of the BSC Permanent Secretariat and the FOMLR Ag to discuss form and content of legally binding document	Legally binding document on Fisheries developed by end 2004 and result on national negotiations reported and taken into account in the document	BCS, BSC Permanent Sec, BSERP, FOMLR Ag, national ministerial reps. International and local consultants	MEIS/ DPM	3 Q 2004 - 1 Q 2005
2.6.2 Prepare outline and carry out study on sensitive habitats and nursery grounds and prepare recommendations for the establishment of fisheries-free zones and marine protected areas in the Black Sea with particular focus on the NW Shelf	Planned for phase 2	- Prepare and initiate study to identify sensitive areas in the marine ecosystem according to international legislation - Provide recommendations for the BSC	Report on study on sensitive habitats and nursery grounds with recommendations for the establishment of fisheries-free zones and marine protected areas ready by end 2005;		MEIS/ DPM	3 Q 2004 - 1 Q 2005
2.6.3 Support the preparation of annexes on fisheries-free zones and marine protected areas to be introduced in the Protocol on Protection of Biological and Landscape Diversity of the Bucharest Convention	Planned for Phase 2	-FOLMR AG to produce recommendations for the establishment of national fishery free zones in the Black Sea	The preparation of annexes on fisheries-free zones and marine protected areas		MEIS/ DPM	1 Q 2005 – 1 Q 2007
2.6.6 Working Plan to monitor observance of the fisheries-free zones						
2.6.4 Develop concept paper and methodology to reinforce the implementation of the future document on fisheries prepared under 2.6.1 for the assessment of migratory population of fish species and their relationship with sensitive habitats and current fishing practices	Planned for Phase 2	-Concept paper prepared for assessment of migratory species in the Black Sea - Carry out study of relationship of migratory species and the environmental status of the costal and marine waters of the Black Sea.	Concept paper and outline of study on migrating fish population and nursery grounds available by mid 2005 and search for financial support initiated.		MEIS/ DPM	1 Q 2005 – 1 Q 2007

2.6.5 Prepare and implement training and information seminars for the fishermen community on proposed fisheries-free zones and sustainable exploitation of fish resources in the Black Sea	Planned for Phase 2	Design of training course Identify stakeholders Provide training seminar to reps. of national fishing communities	Fishermen communities informed and conscious on sustainable fishing practices and fisheries free zones by end 2006;	BSC/PS, BSERP, FOMLR Ag, International and local consultants	MEIS/ DPM	1 Q 2006 – 1 Q 2007

PROJECT MANAGEMENT SHEET

Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems

Output: 3.1 Overall economic analysis carried out to derive a set of socio-economic (performance) indicators linked to cost-effective measures in respect to reduction of nutrients and hazardous substances

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
3.1.1 Prepare guidelines and templates for the socio-economic analysis for Black Sea countries in applying the methodological approach developed for economic analysis under the EU WFD, and in building on results from Phase I on root cause analysis of environmental degradation	Socio-economic and root-cause analysis initiated by GIWA	- Design Terms of Reference and appropriate guidelines for the national experts	Guidelines and templates for socio-economic analysis prepared by end 2004 in line with existing methodologies[33]	BSC, BSC Permanent Sec., BSERP, UNEP, ad hoc EU Water Framework Group, international and local consultants	MEIS/ DPM	3 Q 2004 – 1 Q 2005
3.1.2 Carry our socio-economic analysis at national level and identify significant deficiencies regarding water supply and wastewater legislation, including water pollution charges, fines and incentives)	Planned for Phase 2	- Assist in elaboration of national socio-economic analysis	First national reports on socio-economic analysis available by mid-2005		MEIS/ DPM	3 Q 2004 - 1 Q 2005
3.1.3 Organise consultation and information meeting with Government officials, national consultants and other holders of information to explore possibilities for cost recovery for water services	Planned for Phase 2	- Organise national workshops on cost recovery for water services	Consultation and information workshops organised end 2005 to amend and endorse national reports	BSC, BSC Permanent Sec., BSERP, DRB, local government and municipality reps. international and local consultants	MEIS/ DPM	1 Q 2005 – 1 Q 2006

Output: 3.1 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
3.1.4 Summarise results of socio-economic analysis at national level and evaluate the mechanisms for cost recovery for water services in line with EU WFD guidelines	Planned for Phase 2 building on the results from GIWA in Phase 1	- Report on socio-economic analysis and proposal on implementation of mechanism for cost recovery for water services	Second draft of national reports available after workshop	BSC, BSC Permanent Sec., BSERP, UNEP, ad hoc EU Water Framework Group, international and local consultants	MEIS/ DPM	1 Q 2005 – 1 Q 2007
3.1.5 Prepare summary report on socio-economic situation in Black Sea coastal countries and make judgment about the most cost-effective combination of measures in respect to reduction of nutrients and hazardous substances		- Analyze a socio-economic situation in the BS countries and make proposal on measure in respect of reduction nutrients and hazardous substances	Summary report on socio economic analysis, focusing on coastal zones, including programme of measures for agriculture, industry and urban sectors with cost estimation and selection of most cost-effective solutions available beginning 2006 endorsed by BSC Expert Group		MEIS/ DPM	1 Q 2006 – 1 Q 2007

PROJECT MANAGEMENT SHEET

Objective 3: Development of economic instruments and promotion of investment opportunities in coastal zones for pollution control and protection of Black Sea ecosystems

Output: 3.2 Investment programme for industrial and municipal wastewater treatment and other infrastructural measures in Black Sea coastal zones submitted to IFIs.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
3.2.1 Prepare investment programmes for municipal, industrial and other infrastructural projects in coastal zones of the Black Sea to reduce nutrients and hazardous substances affecting Black Sea waters and coastal ecosystems (in line with guidelines established by the DABALS-PPC)	Planned for Phase 2	- Prioritise inventory of pollution sources in agriculture, industrial and municipal sectors (taking into account criteria for hotspot identification (section 2.5.2) in the coastal zone of each Black Sea country - Prepare investment guidelines for selected project	(3.2.1-3.2.2) Investment programmes prepared in line with templates set up for DABLAS data base (ICPDR) by mid 2005 for municipal, industrial and other infrastructural projects for all Black Sea countries (coastal zones) and priorities identified	BSC, BSC Permanent Sec., BSERP, WB (IFIs), EU, Dablas Task Force, International and local consultants.	CTA	3 Q 2004 – 1 Q 2006
3.2.2 Prioritise investment projects at national and regional level in taking into account environmental, economic and financial (bankability) considerations in applying DABALS prioritisation methodology	Planned for Phase 2	- Prioritise selected projects at national and regional level			CTA	3 Q 2004 – 1 Q 2006
3.2.3 Evaluate the potential of the local and/or regional financial intermediaries (e.g. Black Sea Regional Development Bank) as a means of channelling funds to small/medium sized bankable projects in the Black Sea coastal zone	Report finalised with recommendations for Phase 2 activities	- Analyze the potential small/medium sized bankable projects on limitation nutrients load and hazardous substances - Report on potential regional and national financial intermediaries	Potential of local and/or regional financing institutions or intermediaries in RU, GE and TR identified by mid 2005	BSC, BSC Permanent Sec., BSERP, WB regional IFIs, International and local consultants	CTA	1 Q 2005 – 1 Q 2006
3.2.4 Examine opportunities for public-private partnership for investment projects in the Black sea costal zone (e.g., municipal water supply and wastewater treatment, fishing and fish processing, environmental friendly industrial production, e.g. production of phosphate-free detergents, new technologies in organic farming, etc.)	Report highlighting legal issues and opportunities for PPP in each country	- Analyze potential forms of public-private sector partnership and investment projects in respect of limitation nutrients and hazardous substances at the regional and national levels - Make appropriate recommendations on public-private sector partnership	Potential for public private partnerships (list of firms or organisations) in RU, GE and TR identified by mid 2005	BSC, BSC Permanent Sec., BSERP, DRB, local government and municipality reps. internation and local consultants	CTA	3 Q 2004 – 1 Q 2006
3.2.5 Organise, in cooperation with DABLAS PPC donor conference (IFI and bilateral donors) to mobilize financial support for the implementation of industrial pollution reduction, municipal WWTP and other infrastructural measures to protect coastal waters and ecosystems of the Black Sea	Planned for Phase 2	- Prepare analysis on measures related to protection coastal waters and ecosystems of the Black Sea - Organise and conduct donors conference	A Donor Conference for Black Sea coastal zones organised in 2005 in one of the Black Sea countries presenting at least 20 priority projects for donor support	BSC, BSC Permanent Sec., BSERP, WB (IFIs), EU, Dablas Task Force, local government and municipality reps.	CTA	3 Q 2005 – 1 Q 2006

PROJECT MANAGEMENT SHEET

Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention

Output: 4.1 Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) developed for coastal zones and marine ecosystems in creating and introducing operational tools and indicators to evaluate changes over time in the coastal and marine environment.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.1.1 Further develop and/or upgrade the BSIMAP including relevant chemical and biological indicators and optimisation of sampling sites, taking into account the main principles of the EU WFD for coastal and transitional waters, the forthcoming EU marine Strategy and other marine monitoring programs currently in use	Pilot monitoring programme completed, This included: (i) selection of environmental status indicators (ii) harmonisation of methodologies and (iii) development of an appropriate QA/QC systemf or national monitoring laboratories	Design of further pilot monitoring programmes for monitoring of hazardous substances and the determination of effective regional spatial coverage	(4.1.1-4.1.2) Black Sea Monitoring Programme based on relevant chemical and biological indicators, fully operational by mid 2005 with full cooperation of national institutions (laboratories) taking into account EU requirements for marine and costal zone monitoring and applying QA/QC procedures	BCS, BSC Permanent Sec, EEA, BSERP, IAEA, relevant Ags, PMA RAC, Independent international consultant	MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.1.2 Establish and implement QA/QC procedures including inter-institutional calibration exercises for chemical and ecological monitoring and the development of the Standard Operating Procedures (SOP)	Needs analysis undertaken in all designated Black Sea monitoring laboratories	- Continued QA/QC development in the Black Sea region for biological and chemical parameters prescribed within BSIMAP - Drafting of SOPs for national monitoring laboratories -Provide training as necessary			MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.1.3 Strengthen the capacitates of identified monitoring institutions through staff training as needed for improved ecological monitoring, and provide, where necessary, basic monitoring equipment			(4.1.3-4.1.4) Monitoring institutions in all BS countries operational, handbook for operation of BSIMAP prepared, staff trained as needed and basic equipment (where necessary) supplied by mid 2005		MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.1.4 Prepare a complete set of technical documents for the implementation for the operation of the BSIMAP (handbook), building on the results of the corresponding activities from the TACIS project	BSIMAP handbook to be developed in Phase 2	-facilitate a meeting to determine the contents and sources of information for inclusion in a BSIMAP operational handbook -contract local consultants to collate necessary information -undertake national translation			MEIS/ DPM	3 Q 2004 – 1 Q 2006

Output: 4.1 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.1.5 Develop pilot projects and carry out testing of the monitoring programme with emphasis on environment status indicators, hazardous substances, spatial coverage and regional scopes	See 4.1.1	- Proposal on implementation of pilot project and testing monitoring program	Pilot project to test monitoring program set up by mid 2005, running test program up to end 2006	BCS, BSC Permanent Sec, EEA, BSERP, IAEA, relevant Ags, PMA RAC, Independent international consultant	MEIS/ DPM	1 Q 2006 – 1 Q 2007
4.1.6 Organise workshops on application of modern assessment techniques and SOPs	See 4.1.2	- Workshop implemented; appropriate workshop documentation broadly disseminated	Laboratory technicians are familiar with application of SOPs		MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.1.7 Design and assist implementing a pilot project within the development of a Black Sea Vessel Traffic Oil Pollution Information System (VTOPIS)	Scoping study undertaken by ESAS Ag representatives	- Proposal on implementation of pilot project	Pilot project to test Black Sea Vessel Traffic Oil Pollution Information System developed by mid-2004 and results available by end 2005.		MEIS/ DPM	3 Q 2004 – 1 Q 2006

PROJECT MANAGEMENT SHEET

Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention

Output: 4.2 Black Sea Information System including tools for GIS, mapping and remote sensing developed to support the activities of the BSC and implementation of the BSSAP.

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.2.1 Support the development and the operation of the Black Sea Information System (BSIS), administered at the premises of the BSC/PIU (intranet) and ensure that it is widely used by all Black Sea expert bodies, activity centers and other operational bodies under the Black Sea Commission, as well as accessible to the public (internet)	-Informational strategy developed -Equipment procured for Ags to support the set-up and functioning of BSIS	-Further development and implementation of reporting tools -development of GIS and web interface of the system -initiate regional training -development of manuals and documentation of the system	State of the Environment Report (annual and 5-year)	BCS, BSC Permanent Sec, EEA, BSERP, relevant Ags, International and local consultants	MEIS/ DPM	3 Q 2004 – 1 Q 2007
4.2.2 Improve reporting formats with user friendly interface to assure coherent and analytical presentation of data and information	- Reporting formats for all Ags developed in the format of EEA -Database has been designed and developed - Databases are being populated with data		(4.2.2-4.2.6) Black Sea Information system fully established and operational by mid 2005 within intranet area and for the public access (Internet) and operational units established at national level in all BS countries to facilitate exchange of information and emergency message		MEIS/ DPM	3 Q 2004 – 1 Q 2005
4.2.3 Link all Contracting Parties of the Black Sea Co mmission to the BSIS, which implies the establishment of operational units at the national level to communicate also in case of accidental emergency situations	Planned for Phase 2				MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.2.4 Assure links with regional and global information systems (e.g. SeaSearch, Black Sea GOOS, DANUBIS, Black Sea Database , etc)	Planned for Phase 2			BCS, BSC Permanent Sec, EEA, BSERP, DRB , relevant Ags, International and local consultants	MEIS/ DPM	3 Q 2004 – 1 Q 2007

Output: 4.2 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.2.5 Prepare special interactive web sites for public information and response with particular attention to new technologies in the agricultural and in the industrial sectors (BAP/BAT), in urban wastewater treatment, coastal zone management, etc	-Informational strategy developed -Equipment procured for Ags to support the set-up and functioning of web sites	- Further development and implementation of interactive web sites	As above	BCS, BSC Permanent Sec, EEA, BSERP, DRB, WB – APCP, relevant Ags, International and local consultants	MEIS/ DPM	1 Q 2006 – 1 Q 2007
4.2.6 Develop and operate the Black Sea GIS including textual, numerical and digital mapping information, appropriate data base and reporting formats		-Development of GIS and web interface of the system -initiate regional training -development of manuals and documentation of the system			MEIS/ DPM	1 Q 2005 – 1 Q 2007
4.2.7 In cooperation with the Joint Research Centre (JRC) download, interpret and distribute on a regular basis Sea Wifs colour scan satellite data, and assure extended use of GIS	-data assessment methodologies agreed -Equipment procured for Ags to support the set-up and functioning of BSI -remote sensing procedure initiated in Phase 1 as part of ISG activities	-Data assessment methodologies documented (including all statistical approaches and recommended software packages) - Training programme designed and executed in the Black Sea region -Continued remote sensing of eutrophication to determine specific algorithms for the Black transitional, coastal and marine waters.	(4.2.7-4.2.8) Black Sea GIS including mapping tools and download of satellite data operational by end 2005 and accessible by all contracting parties and public users	BCS, BSC Permanent Sec, EEA, JRC, BSERP, relevant AGs, International and local consultants	MEIS/ DPM	3 Q 2004 – 1 Q 2006
4.2.8 Assist in preparing coherent outline and drafting of the State of the Environment Report, as required by the BS SAP	-Information strategy agreed. State of Environment report planned for Phase 2	-Data collated and analysed in terms of specified indicators, as designated under the BSIS		BSC Permanent Sec, EEA, BSERP, DRB, relevant Ags, International and local consultants	MEIS/ DPM, EE	3 Q 2004 – 1 Q 2005
4.2.9 Launch training at the national level and organise a series of workshops to train users in the best use of the tools made available by the system (interactive	Planned for Phase 2	-Design and deliver training programme	All members of BSC bodies and staff of national operational units or information centres as well as NGO representatives have received	BSC Permanent Sec, EEA, JRC, BSERP,	MEIS/ DPM	1 Q 2005 – 1 Q 2007

web site, update of database, etc)			training by 2005 to make fully use of the BS Information System.	Intern. and local consultants		

PROJECT MANAGEMENT SHEET

Objective 4: Development of operational systems for monitoring, information management and research under the Black Sea Convention

Output: 4.3 Research Programme designed and implemented to assess input of nutrients and hazardous substance in the Black Sea

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.3.1 Carry out survey cruises in the Black Sea with special emphasis on impact assessment in the NW Shelf based on existing research programme (Aug/Sept 2004 and Jan. 2005); and identify sources for additional funding to extend present programme to other recognized impact areas of the Black Sea	- research plan agreed by BSC - ISG members contracted to carry out target-based research -Two cruises completed by end Phase 1	- conduct further cruises to complete information gaps - undertake data analysis for physical, chemical, geo-chemical and biological research studies - presentation of research results in BSC Scientific Conference -publication of research results in international peer reviewed journal - incorporation of research results into decision-making procedures	-Results of first survey cruises available during 2005 - Funds requested for additional extension of survey cruises to other recognized impact areas	BCS, BSC Permanent Sec, BSERP, ISG, relevant AGs	CTA, EE	3 Q 2004 – 1 Q 2006
4.3.2 Prepare and carry out study on inputs of nutrients to the Black Sea by atmospheric deposition	- research plan designed for phase 2 study	- conduct study covering atmospheric deposition to the Black Sea (one year study) - coordinate study with ARENA project to predict meteorological influence on transport of contaminants -develop model for prediction of atmospheric deposition of nutrients and hazardous substances from land to the Black Sea	Scientific study on nutrient inputs by atmospheric deposition is concluded by end 2006	BCS, BSC Permanent Sec, EEA, BSERP, ISG, EU ARENA, local consultants	EE, CTA	3 Q 2004 – 1 Q 2007

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
4.3.3 Further develop/adapt rapid assessment methodology for diffuse sources in the Black Sea basin (taking into account DANUBS models)	-workshop held to agree the approach for assessment of diffuse sources in the Black Sea region - pilot monitoring programme initiated in Phase 1 (Kamchia river basin, Bulgaria) to calculate the export of nutrients from river to the sea	- Develop methodology for rapid assessment of diffuse sources from the Black Sea basin - data collection as 2.3.1 and 2.4.1 for population of derived model (methodological approach) - testing of rapid assessment methodology in selected regions of the Black Sea coastal zone	Models adapted and tested building up on the results of regional pilot project(s)	BCS, BSC Permanent Sec, river basin commissions, BSERP, DRB (DANUBS), relevant AGs, International and local consultants	EE	3 Q 2004 – 1 Q 2006
4.3.4 Conducting a study for the use of phosphorus in detergents with the aim to obtain baseline information and evaluation of transaction cost for the Black sea riparian countries	Planned for Phase 2	- Liaise with the European detergent industry trade association to obtain information relating to the regional use of detergents (type, usage and costs) - based on available information, review the impact of detergents on the Black Sea marine ecosystem - liaise with the detergent industry, the EU (DGIII) and the ICPDR (DRB) to reach agreement for the future use of detergents in the region	Report on baseline data on phosphorus in detergents and estimation of transaction costs available end 2004	BCS, BSC Permanent Sec, EU (DGIII), BSERP, DRB, Detergent trade Association, International and local consultants	EE	3 Q 2004 – 1 Q 2005
4.3.5 Prepare and organise scientific Black Sea Conference in 2006 to present and discuss results from all ISG activities including results from surveys and identify further knowledge gaps	Black Sea Scientific Conference Committee established	- logistical operations by BS Scientific Conference Committee - review of research conducted within the BS-SAP - recommendations for review of BS-SAP and determination of financial resources required to achieve measures	Preparatory documents prepared and Black Sea Conference organised in 2006	BCS, BSC Permanent Sec, BSERP, ISG, International organisations (NATO, EU), international and local consultants.	CTA	1 Q 2006 – 1 Q 2007

PROJECT MANAGEMENT SHEET

Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

Output: 5.1 NGOs structures and activities reinforced though support for institutional development and community actions in awareness raising, training and education on the issues related to the management of nutrients and hazardous substances.[34].

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
5.1.1 Develop criteria and evaluate the effectiveness of NGOs in the support of management of nutrients and hazardous substances within the coastal zone and marine ecosystems (on the basis of Tranche I Small Grants Programme) and design programme for the implementation of 5.1.2 - 5.1.4	- Development of criteria initiated	- Analyze outcomes of the SGP/Phase I - Proposal on implementation of activities 5.1.2-5.1.4	Set of criteria developed by end 2004	BCS, BSC Permanent Sec, BSERP, NGOs.	PRO	3 Q 2004 – 1 Q 2005
5.1.2 Provide support to the "Umbrella" NGOs and the Black Sea Environmental Education Programme (BSEEP) through capacity building in form of regional consultation meetings and reinforcement of communication and information management (NGO website),	- communication strategy adopted by the BSC	- Support the building capacities of "Umbrella" NGOs to undertake joint activities in respect of limitation load of nutrients and hazardous substances	Optimal operation of Black Sea NGO umbrella organisations is achieved by 2006	BSERP, NGOs, local consultants	PRO	3 Q 2004 – 2 Q 2007
5.1.3 Organise stakeholder training in sustainable coastal zone management (reduction of nutrients and toxics substances) and protection of marine ecosystems as part of the Train Sea Coast programme,	Stakeholder training programme for management of agricultural sector prepared under Train Sea Coast programme	Training organized; appropriate training documentation on environmental protection of coastal areas broadly disseminated	Knowledge and awareness on coastal zone management, reduction of nutrients and toxics are improved by mid 2005	BSERP, BSC Permanent Sec., NGOs, Train Sea Coast	PRO	1 Q 2005 – 1 Q 2006
5.1.4 Support the production and distribution of NGO publications in national languages related to the project objectives.	Material provided by NGOs taking part in Phase 1 SGP	- Collate and edit and publish appropriate material on nutrient reduction and hazardous substances	NGO publications related to nutrient and hazardous substances, in national languages, are regularly published	BSERP, NGO, Project Offices	PRO	3 Q 2004 – 2 Q 2007

PROJECT MANAGEMENT SHEET

Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

Output: 5.2 Community actions for awareness raising and environmental protection implemented with funding from GEF "Small Grants Programme" targeted specifically at the support/participation in the management of nutrients and hazardous substances

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
5.2.1 Evaluate results of the first tranche of community based projects financed in the frame of the GEF "Small Grants Programme" through an independent evaluation firm;	Planned for Phase 1 end/Phase 2 start (on-going)	- Select appropriate independent organization to conduct further evaluation of effectiveness of SGP -Review Final Reports on SGP/Phase I	Evaluation report on results of 1st tranche of SGM is available in mid 2004 and recommendations are taken into account for implementing 2nd tranche of SGP;	BCS, BSC Permanent Sec, BSERP, NGOs, Independent international consultant	PRO	3 Q 2004 – 1 Q 2005
5.2.2 Define type of projects eligible for GEF SGP support and develop methodology and procedures for selection of projects, follow up of programme implementation and final evaluation of results,	Planned for Phase 2 (according to the decision of 2nd Steering Commitee held in September 2003).	- Develop a proposal on eligibility criteria and selection procedure for countries consideration according to the GEF policy - Establish Selection Committee on SGP according to the GEF policy	(5.2.2-5.2.3) Based on experience of 1st tranche, methodology and procedures are prepared and selection of projects for implementing 2nd tranche of SGP is achieved by end 2004	BCS, BSC Permanent Sec, BSERP, NGOs	PRO	1 Q 2005 – 4 Q 2005
5.2.3 For second tranche, identify, in line with above methodology, projects for reduction of nutrients and hazardous substances in coastal area,	Planned for Phase 2	- Select eligible projects - Provide appropriate funds for projects implementation		BCS, BSC Permanent Sec, BSERP, NGOs	PRO	2 Q 2005 – 4 Q 2006
5.2.4 Assure efficient implementation and follow up of GEF SGP in Black Sea coastal areas through subcontracting experienced firm or organisation ,	Responsibility of NGO coordination gradually passed to NGO 'umbrella' organisation in the latter stages of phase 1	- Contract on the tender base organization that will conduct appropriate activities in respect of SGP to secure its efficient implementation and follow up - Approve related workplan	Efficient and effective NGO involvement in coastal zone management and pollution control is assured through good organisation and careful follow up of SGP implementation (end 2004 to end 2006)	BSERP, NGO 'umbrella' organisation	PRO	3 Q 2005 – 1 Q 2007
5.2.5 Evaluate results of the second tranche of community based projects financed in the frame of the GEF "Small Grants Programme" through an independent	Planned for 2nd Phase	- Selection of appropriate company - Design and approval of evaluation methodology	Evaluation report on implementation of 2nd tranche of SGP is available beginning 2007	BCS, BSC Permanent Sec, BSERP, NGOs, Independent international consultant	PRO	2 Q 2007

evaluation.						

PROJECT MANAGEMENT SHEET

Objective 5: Strengthening of public participation in environmental protection through access to information, stakeholder training and awareness raining and implementation of community actions (Small Grants Programme)

Output: 5.3 Public information on reduction of nutrients and hazardous substances, their effect on the Black Sea ecosystem, and the recovery measures are disseminated to the public at large (i.e. by means of the Communication Strategy, Educational Programme, Public awareness campaigns, media coverage)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
5.3.1 Conceptualise and implement in line with Communication Strategy developed in Phase I, public information and awareness raising campaigns on sustainable coastal zone management and protection of coastal and marine ecosystems in all Black Sea countries (to be translated in national languages by Governmental department or NGO concerned)	Initiated in phase 1 through NGO networks as part of SG projects.	- Proposal on public awareness campaign on sustainable coastal zone management and marine ecosystems in the BS countries - Organise translation of related materials on public awareness campaigns into the national languages	Decision makers of public and private sector, opinion leaders and the general public are better informed and sensitised on issues related to coastal zone management and protection of coastal and marine ecosystems (continuous until end of the BSERP)	BSC, BSERP, DRB, NGOs, relevant AGs	PRO	3 Q 2004 – 2 Q 2007
5.3.2 Develop and produce, in line with Communication Strategy, materials for public press and mass media on subjects related to management of coastal zones and marine ecosystems (with focus on eutrophication and sustainable fisheries), reduction of nutrients and toxic substances, and recovery of Black Sea ecosystems	Content provided from SGP in Phase 1	- Develop and edit materials for mass media and public press - Involve different means of media into the process of information dissemination	Sufficient and reliable information for mass media purposes are prepared and published (continuous until end of the BSERP)	BSC Permanent Secretariat, BSERP, NGOs, RECs, International and local consultants	PRO	3 Q 2004 – 2 Q 2007
5.3.3 Support environmental education in schools through the development and introduction of specific messages for nutrient reduction and sustainable management of the coastal zone and marine ecosystems (the Black Sea Environmental Education Programme, BSEEP)	-Education study-pack developed and partly disseminated in the region	- Finalize and publish education materials - Organise national pilot testing of education materials -Evaluate results of pilot testing program and formulate recommendations on further implementation of BSEEP	Environmental education in schools is introduced through BSC/BSERP initiative by mid 2006		PRO	3 Q 2004 – 4 Q 2006

Output: 5.3 (Continued)

Activities	Status at the End of Phase I	Implementation Steps in Phase II	Specific Outputs in Phase II	Implementation Arrangements	Resp. (PIU)	Indicative Time Frame
5.3.4 Encourage the production of a popular documentary film on the Black Sea environmental protection based on the script developed in Phase I and identify relevant sources for financial support	- Ad hoc movie group established to produce story-board for documentary and to determine the pre- and post production costs -identification of potential donors - finalisation of proposal	- Establish a Creative Team on the Black Sea movie - Develop a proposal on the Black Sea movie for further consideration by donors/sponsor - Contact potential donors for financial support for the movie production process	Funding sources for the documentary film are identified by end 2005 and it is produced by 2007	BSERP, ad hoc movie group	PRO	3 Q 2004 – 1 Q 2006
5.3.5 Assist in developing and producing information material on management of coastal zones and marine ecosystems (with focus on eutrophication), reduction of nutrients and hazardous substances, recovery of Black Sea ecosystems, sustainable fisheries, etc.	Continuous production of material disseminated by through website and NGO network (updated project materials, newsletters etc.)	- Collect, edit and produce information materials - Disseminate materials among respective stakeholders in the BS countries	(5.3.5-5.3.6) Basin-wide information material on management of coastal zones and marine ecosystems, reduction of nutrients and toxics, sustainable fisheries, etc., are periodically published and presented on interactive web site for public information and response (continuous until end of BSERP)	BSERP, BSC Ags, NGOs, International and local consultants	PRO	3 Q 2004 -2 Q 2007
5.3.6 Prepare interactive web site for public information (see also Activity 4.2.5)	Continuous development	- Develop materials for web-site - Regular update of the web-site - Disseminate information about web-site among related stakeholders		BSERP, NGO network	PRO	3 Q 2004 – 2 Q 2007
5.3.7 Evaluate at the end of the GEF BSERP the effects and impact of public information and awareness raising campaigns	Planned for Phase 2	- Prepare evaluation methodology - Analyze effect and impact of public awareness campaigns and make appropriate proposal on public awareness activities	Evaluation report on results of communication strategy and awareness raising activities is available in 3/2007	BSERP, independent international consultant, UNDP, GEF	PRO	2 Q 2007

Appendix K BSERP Implementation Schedule for Phase II

Appendix L APR/PIR as of June 2003

OFFICIAL TITLE:	Control of eutrophication, hazardous substances and related measures for rehabilitating the Black Sea ecosystem: Phase1		
UNDP PROJECT NUMBER:	RER/01/G33/A/1G/31	**GEF PROJECT NUMBER:**	
DATE OF REPORT:	May 2003	*Date of Last APR:*	-

*1. BASIC PROJECT IDENTIFIERS- **Please enter all date (DD/MMM/YEAR)***	
COUNTRY	Regional (Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine)
FOCAL AREA	International Waters
OPERATIONAL PROGRAMME	8 (Water-body based)
DATE OF ENTRY IN WP	May 2001
PRODOC SIGNATURE DATE	19 December 2001
DURATION (MONTHS)	24

*1.1 BRIEF PROJECT DESCRIPTION -**Please limit to maximum 100 words.***

The project (BSERP) supports regional aspects of nutrient control in the Black Sea coastal countries. It also aims to strengthen the role of the Black Sea Commission to ensure the formulation, adoption, and implementation of a suite of harmonized legal and policy instruments for tackling the problem of eutrophication and release of certain hazardous substances; and to facilitate ecosystem recovery, including through sustainable use of living marine resources. It encourages broad stakeholder participation. This will be achieved by inter-sectoral consultations, provision of small grants to local initiatives, support for release of information to the public and environmental training/education. The project will employ a new set of indicators for monitoring the effectiveness of the measures taken by the countries. These indicators, together with targeted scientific studies, will help to set new regional nutrient control targets and to adopt action plans which will be implemented through an adaptive management scheme. Although a two-years phased approach had to be taken for the implementation of the overall strategy owing to funding constraints, meaningful progress in the attainment of these objectives would require at least five years of concerted action at the basin-wide level so the overall project is designed as a 5 year intervention, funded by GEF in two tranches.

1.2 BASIC FINANCIAL DATA – Please present all financial values in millions (e.g. 3,502,000 = 3.502)

Funding Source		***Institution Name** (Acronym, if any)*	***Proposed Financing***	***Actual Financing***
A. GEF FUNDING			$4,000,000	$4,000,000
B. CO-FINANCING	UNDP (TRAC)			
	UN AGENCY	A.UNDP B.UNEP C.WMO	a. $240,000 b. $55,000 c. $12,000	$240,000 $55,000 $12,000
	GOVERNMENT (CASH)			
	GOVERNMENT (IN-KIND)	BLACK SEA COMMISSION BLACK SEA BENEFICIARY COUNTRIES GOVERNMENT OF TURKEY	$726,000 $200,000 $150,000	A.$726,000 B $200,000 C.$150,000
	BILATERAL DONORS	EU-TACIS	€3,000,000	€2,800,000
	MULTILATERAL DONORS			
	REGIONAL BANKS			
	NON-GOVERNMENTAL ORG.			
	PRIVATE SECTOR			
	OTHER	BLACK SEA ECONOMIC COOPERATION	$28,000	$28,000
TOTAL COFINANCING			$4,052,366	$3,876,275
TOTAL FUNDING (A+B)			$8,052,366	$7,876,275

2. PROJECT PERFORMANCE

SRF Goal (*):	Environmentally sustainable development to reduce human poverty
SRF Sub Goal (*)	
Strategic Area of Support (*)	

(*) The UNDP Country Office will fill out these fields

2.1 DEVELOPMENT OBJECTIVE- Please rate each objective, not each individual indicator.

Development Objective		Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [35]
The long-term objective is for all Black Sea basin countries to take measures to reduce nutrient levels and other hazardous substances to such levels necessary to permit Black Sea ecosystems to recover to similar conditions as those observed in the 1960s.	Reduction of the nitrogen and phosphorus loads to the Black Sea;	• Effective regional /basin-wide structures for implementation; statutory procedures for monitoring compliance, trends and emerging issues; Black sea Commission fully functioning (2002); Basin-wide decision making process in place (2002) ; regional mandatory reporting (2002), basin wide reporting (2002) • Better understanding of emissions, impacts and responses; (end of Phase 1)	• Black Sea Commission is not fully operational at mid-2003; a Black Sea Danube Task Force established for consultation and decision making at the basin-wide level; reporting requirements partially agreed and implemented (limited); core set of reporting requirements for the basin agreed;	NA	U S

		• Setting common environmental objectives (end of Phase 1)	• Data gathering and exchange initiated for all Black Sea Commission Advisory Groups; • None yet established at the regional or national levels (despite the broad objective to revert back to the conditions in 1960s and not to exceed 1997 levels)		U
		• Identification and adoption of cost-effective practical alternatives to current practices (legal, administrative, investments); (end of Phase 1)	• National and regional level legal measures are yet to be studied; feasibility of sectoral and environmental measures need to be studied for each country and for the region.; high priority investment requirements studied (DABLAS) but yet to be financed.		U

	Enhancement of the service function of wetlands and benthic (seabed) plant communities for the assimilation of nutrients;	• Better understanding of emissions, impacts and responses	• Environmental Status monitoring has been initiated according to the Black Sea Commissions wishes which differ from the original project brief. This initial exercise is not expected to yield the expected capacity-building envisaged in the project document.		U S
		• Conservation principles and methodologies available	• A Protocol on Biodiversity adopted, strategy and methodologies yet to be developed and adopted		S U
		• Conservation status introduced and coverage is extended	• Limited; at the national level only		U
		• Stakeholders involved in process	• Involvement limited to several NGO projects implemented		
		• Rehabilitation project(s) implemented	• As above		

	Improved management of critical habitats to permit economic recovery of fisheries in parallel with improvements to the ecosystem	• Establishment of a regional management regime • Studying state of fish and other living resources and their habitats • Implementing ecosystem based fisheries • Pilot implementation of protected areas, • Awareness and stakeholder participation	• Intergovernmental negotiations have not been initiated • Data gathering and exchange initiative launched; stock assessment plan currently being developed; • Evaluation of national fisheries management and requirements of EBF being studied • Preliminary data assessment for identifying priority areas • Publications under preparation; direct involvement of sector managers not carried out as planned		U S S S U
			OVERALL RATING		U

2.2.1 IMMEDIATE OBJECTIVE ASSUMPTIONS & RISKS

IO #	Assumption	Risk (measured as the probability that the assumption will not hold)[36]
1.	Continued country commitments for environmental protection, in particular, nutrient reduction at the national level	S
2.	Continued commitment at the regional level; all countries actively participate in BSC and/or Project implementation	S
3.	The countries in the wider basin are willing to establish a permanent mechanism for co-operation	M
4.	Economic, financial and technological constraints hamper adoption and implementation of key measures	H
5.	Economic and social reforms, regional integration processes, and donor assistance in the region will continue to considerably improve governance and work in favor of eliminating bottlenecks hindering cross-sectoral integration and full stakeholder participation in project implementation	H
6.	A sustainable and effective data and information sharing, and decision support system is established at the regional and basin wide levels	M

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
1	Support the integration of a sustainable Secretariat for the Bucharest Convention	Programme Implementation Unit (PIU) fully staffed and operational	Staffing was gradually completed. By January 2003 all core staff were appointed. Unfortunately during the first year of the project, 2 professional and one supporting staff members contracts were cancelled causing much disruption to the project as a whole.		U
		Establish and operate the BSEP Joint Programme Management Group, the BSEP Executive Board and the Project Steering Group	Steering Committee convened in May 2002 . Next meeting is called for early May 2003. BSEP Executive Board is functioning. Joint planning of activities, cost sharing for activities and routine operation exercised. Joint Project Management Group could provide programmatic guidance at all times, and during Steering Committee or BSC meetings in particular. A meeting which was intended to be the 2nd Steering Committee, was held in May 2003. Due to insufficiently low level of representation by the countries, the meeting was turned into a Consultative Meeting. A number of major implementation issues of the project implementation have been discussed and the major concerns expressed. A decision has been made to call the 2nd Steering Committee of the Project in 18-19 September 2003.		S
		Advisory Groups and Activity Centres operational and engaged in addressing transboundary issues	Support has been given to the work of Advisory groups through project staff and consultants. Equipment needs against functions of the focal points and Activity Centres were assessed and a short and medium term procurement plan was prepared and cost sharing arrangements with the Tacis project were agreed upon. Procurement of needed equipment has been initiated. Some delays are observed from the countries to provide adopted lists, although the situation is different in different countries. A number of meetings of the Advisory groups have been supported by the project. Capacity and performance of the Advisory groups is ensured through staff time allocation for regional tasks. Capacity and commitment for serving for regional needs by the Regional Activity Centers still has to be improved. A survey was undertaken to evaluate the data gathering, assessment and exchange capacity and needs of Advisory Groups and Activity Centers. The institutional set-up of the Black Sea Commission's framework is strengthened by the involvement of additional resources both human and financial.		S

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
	Support the integration of a sustainable Secretariat for the Bucharest Convention (continued)	Istanbul Commission able to raise funding for transboundary projects	EU Tacis Assistance for the Black Sea Environmental programme was launched in summer 2002. Project is providing support for the three NIS countries together with the Black sea Commission. The Commission also received two additional grants from the EC in 2002. A number of activities, as well as other issues, are co-financed by the mentioned projects. This provides for a better cooperation of the resource deployment in the Black Sea region.		**S**
		A Joint Management Committee is established between the Black Sea and Danube Commissions for basin wide decision making	The Memorandum concerning cooperation between the Black Sea and Danube Commissions was signed in November 2001.. A task force (DABLAS Task Force) was established as a platform for common decision making and encouraging investments for environmental protection, in particular for reduction of eutrophication. BSERP participates in the process. Also A Joint Technical Working Group was established with the mandate to develop harmonized monitoring systems, common assessment of the ecological status of inputs of nutrients and other hazardous substances, compatible reporting formats for input loads and the assessed ecological status, and formulate appropriate measures to limit discharge of nutrients. Besides regular meetings (at least twice a year), electronic forum has been set up on the Project web site to facilitate operational exchange of opinions and form a means for discussions.		**S**
		Information in the public domain throughout the Black Sea coastal region regarding the transboundary problems and solutions offered.	Popular version of the Blacks Sea SAP was published in Bulgarian, Turkish and, Romanian, languages. *(English, Russian and Ukranian were published previously) The newsletter Black Sea Shared was published in English and posted on web in all local languages. A table-top calendar for the promotion of the Black Sea Environmental programme and introducing partners in the process was published for 2003. A reference book for coast guards, fishing communities, etc. is under preparation.. A web page for the project had been developed and upgraded continuously, providing information on project related activities and a modern means of communicating with partners.		**S**
			OBJECTIVE 1 - OVERALL RATING		S

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
2	Regional actions for improving LBA legislation to control eutrophication and for tackling emergent problems.	In depth study and stakeholder consultations at the national and regional levels on existing legislation, policies and practices, and identification of gaps and prospects for change	This activity has been delayed due to a number of constraints. Data availability is a major constraint in conducting the referred analysis. The real situation is that environmental data is fragmented and obsolete, and is not assessed against socio-economic data. Addressing non point sources mainly emanating from the agriculture sector is also essential in addition to point sources. In order to improve the situation and to speed up implementation of these tasks a number of activities have been initiated, such as involvement of a consultancy specialised in the corresponding field, as well as reaching out into the region by involvement of a number of individual foreign and local consultants, and setting up of meetings. Redistribution of project resources, thematic and geographical prioritisation, revision of implementation arrangements is also suggested.		U
		Study of emergent issues in the Black Sea and their social and economic root causes based on application of the GIWA methodology.	Inadequacy and validity of data is a constraint for employing the methodology for the assessment. The GIWA methodology has to be further strengthened with quantified analysis. Intervention/decision is required by the Project Steering Committee. An alternative approach is being developed. Both approaches will be presented and discussed at the coming meeting.		U
		Clear commitments made at the national and regional levels, for legal, administrative and technical measures	Before suggesting commitments for the region and individual countries, the analysis and planning process referred to above has to be undertaken, taking full account of economic, social, and political realities of the region such as the EU accession process. Otherwise possible commitments will be unrealistic and could hardly be fulfilled. The project has not succeeded to make any significant impact in this area except by the formation of an ad-hoc EU Water framework Working group.		U
			OBJECTIVE 2 - OVERALL RATING		U
3	Assist countries to improve their knowledge of the process of eutrophication in the Black Sea	Integration of international study group on Black Sea Eutrophication.	An Advisory Board composed of select scientists from coastal countries, PIU was established with a view to prepare the TOR for the ISG. Two meetings were held for this purpose. Previous scientific survey results were reviewed and proposals were called in 8 different fields. The Advisory Board evaluated proposals. ISG met in January 2003 to prepare the first draft of the survey plan. 3 surveys each having two legs were agreed upon and planned in detail. Currently all contractual and logistical issues are being finalised.		S
		Peer reviewed study plan	Contracting is under way.		S

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
		Completion of 2 surveys in 2002 and studies of nutrient sources, sinks and fluxes.	Surveys planned in summer and winter 2003 and spring 2004. The slight delay in completing the surveys and assessment is due to the extensive work that was required to plan the surveys, the formal procedures for obtaining necessary permits and intrinsic characteristics of the study and is hardly avoidable.		S
		Publication of State of the Black Sea Report, 2003 Copies of the satellite color scan maps and explanatory reports distributed widely in all six Black Sea countries	Will be delayed until summer 2004 as agreed with the Permanent Secretariat to the Black Sea Commission The interpretation and delivery of satellite data has been delayed due to the postponement of one of the cruises		S U
			OBJECTIVE 3 - OVERALL RATING		S
4	Introduce new sectoral policies and laws, and a system of process, stress reduction and environmental status indicators for monitoring the effectiveness of measures to control eutrophication (and harmful substances where appropriate)	Written agreement of the agricultural, industrial and municipal government sectors in each country to cooperate on specific indicators and to help to develop and implement measures within their area of responsibility.	Delay in reaching an agreement on the methodology to be applied for analysing the sectors (see also 2. above) and formulating measures. Implementation will start following the Steering Committee. Problems encountered in establishing direct working linkages with sector managers in countries. ToRs for country team leaders are prepared, national teams could not be established. This task cannot be fulfilled without direct involvement of stakeholders. A number of interventions are being planned. One of the planned activities is to set up an institutional framework of the project implementation, which will strengthen the present cooperation and eventually lead to setting up of national and coastal inter-sectoral committees.		U
		Adopted new system of process, stress reduction and environment status indicators employed, in parallel with the work undertaken during the PDF-B phase.	Status and process indicators suggested in PDF-B phase were introduced to different Advisory Groups of the BSC for their review and feedback. No feedback was received. The BSC Secretariat elaborated draft reporting formats for continuous formal reporting to the BSC. BSERP supports the BSC in implementing the reporting and developing a proper storage and retrieval means as a part of the Black Sea Information System. Along with this, the BSERP has also planned a 10 years historical data (environmental and socio-economic) compilation exercise which will be used for setting the background and justifying the validity of the final set of indicators to be adopted.		S
		Indicator data used to enforce existing/new laws, policies and regulations regulation and for regional status and trends reports	An effort to close the environmental and socio-economic data gap is essential initially. The process of data requirements for the choice of indicators for all Black Sea Activities related to process, status and stress reduction indicators has been delayed due to lengthy discussions and responses of the Black Sea Commissions various Advisory groups		U

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
		Conduct a pilot status-monitoring programme and publish its report.	The basic approach for integrated monitoring and assessment programme for Black Sea (BSIMAP) has been established by the PS of BSC. In order to ensure sustainability, the status-monitoring programme has to be an integral part of BSIMAP. After intensive consultations with the BSC PS and the corresponding Advisory Group (PMA), a pilot monitoring programme has been designed. Presently, contracts are agreed with the countries to conduct pilot monitoring exercise and sample at agreed locations and depths in Sept, Nov and Dec 2003. The pilot exercise does not represent the needs of the Black Sea with respect to harmonisation of methodologies and the required implementation of QA/QC measures to ensure a sound pollution monitoring and assessment programme.		U
		Use of the information base by all six countries.	The BSERP consultant and BSC PS Staff conducted a survey of data and information gathering and exchange capacities of the network of institutions that are nominated for undertaking certain tasks within the framework of BSC . A draft strategy was elaborated for data and information exchange and submitted to the Advisory Group. The BSERP on its part is currently developing the architecture for relational databases in which the results of the data collation exercise will be entered. The databases will be accessible through the internet.		S
			OBJECTIVE 4 - OVERALL RATING		U
5	Support the Commission in their periodic review of Adaptive Management objectives.	PIU specialist appointed	Appointment was delayed until November. Though the specialist resigned in April 2003. To compensate, corresponding responsibilities were split between existing PIU team members and external consultants (both international and local).		U
		A team of specialists from the region and outside appointed for this work	Planned, but with the departure of the PIU specialist, this activity has not been carried out		U
		Economic benefit/cost studies of the actions proposed in the Sectoral Master Plans and the National strategies completed	Planned for the second phase.		U
			OBJECTIVE 5 – OVERALL RATING		U

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
6	Assist the public in implementing activities to reduce eutrophication through a programme of grants for small projects and support to regional NGOs.	Public Participation specialist appointed	Specialist appointed for July -end 2002 period replaced by another specialist in January 2003. Choice of the new Public participation specialist was not received warmly in the region since the person chosen was not thought to have the required qualification requested in the ToR. This caused a slowdown and confusion within this area of the project.		U
		Full implementation of first tranche of 29 projects (independent review).	All projects (17) sub-contracted in December 2002-January 2003 with completion dates December 2003. An independent review will be made in the last quarter of 2003.		S
		Successful second call for proposals.	A strategy for the second call is drafted and is under discussion. Following its adoption by the NGO communities and RECs a second call will be made in summer 2003.		S
		Effective contribution of NGOs evidenced by the establishment of a regional NGO WG on nutrient reduction, media reports and presence at significant regional open meetings.	A number of activities were held by NGOs on the International Black Sea Day. These were supported by the PS/PIU through press releases issued in all local languages, the newsletter published in English and posted on web on local languages.		S
		Increased number of wetlands protected and/or restored	A directory of Black Sea wetlands was prepared by international (Wetlands International) and local (NGOs) partners together with detailed recommendations on wetland conservation. This was carried out independently from the BSERP. Small NGO projects portfolio includes a number of projects on this topic. Coordination with EU and WB projects in this field needs to be initiated.		U
		Lists of trained people from coastal countries	Most of the sub-contracted projects incorporate a training component and lists will be available during interim (summer 2003) and final evaluation (end 2003) of projects. Further capacity building is required to complement the relatively small number of people trained as a result of involvement in the NGO Small Grants Programme		U
		Environmental Education Study Pack Published and incorporated in education programmes in the region.	Discussions to enrich the local character of the scientific contents of the draft study pack, to better coordinate with national education authorities as well as Regional Environmental Centers operating in the region are ongoing. Pack will be finalized and published in the second half of 2003.		S
		Train Sea Coast Stakeholder training course on agriculture/environment prepared, validated and delivered to trainers	There was a delay in the operation of the Black Sea Course Development Unit originally designated; the Unit was relocated and new course developers were trained; curricula development workshop was held in Istanbul in February 2003. Completion of course planned for end 2003, first delivery in January 2004.		S
			OBJECTIVE 6 – OVERALL RATING		S

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
7	Formulate proposals for market-based or alternative economic instruments for limiting nutrient emissions and establish private-public sector partnerships for environmental protection in the Black Sea.	'Gap analysis' showing difference between the current use of economic instruments and those that would be required for the effective implementation of national nutrient reduction strategies is undertaken. (end 2002) Reports of actions taken received (2003).	The methodology for environmental and economic analysis is developed and is currently under discussion among partners and beneficiaries. A special contract is prepared for a detailed analysis of existing economic instruments. International experts and consultants will be supported by contracted by the Project local consultants.		S
		Opportunities for public-private sector partnership (e.g. introduction of phosphate free detergents, new technology, organic farming, etc.) within countries identified.	Activities initiated in a number of riparian countries in the field of public-private sector partnership. The first step is an analysis of the stakeholder involvement. This is being currently contracted out.		S
		Loans for nutrient-related investments channelled	An updated priority investment portfolio prepared as part of (by technical and financing sub-committees) DABLAS Task Force established by the BS and Danube Commissions and supported by the EC. Progress is to be reviewed April 2003 onwards. A separate initiative of the BSERP is to hold discussions with a number of International Financial Institutions (IFIs), who will be interested to cooperate in this field. An international consultant is involved, as well as numerous local consultants will be involved in nearest future.		S
		Potential of the local and/or regional financial intermediaries as a means of channelling funding to small/medium sized bankable projects related to nutrient limitation and habitat restoration	Small size projects will be identified as part of the activities described above		S
			OBJECTIVE 7 – OVERALL RATING		S
8	Fisheries exploited within its maximum sustainable yield and incorporating measures to protect ecologically sensitive areas.	Concluding the negotiations of regional Fisheries Convention, particularly in relationship with the need to protect key habitats (2003 and onwards)	Support was provided to the first (int. experts) and second (int. experts, full list of participants) meetings of the AG Fisheries where negotiations where restarted after 5 years. A background document suggesting main management and conservation issues that need to be incorporated in a regional strategy and legal instrument was elaborated by an international consultant. An ad hoc working group has been created to work on fisheries related indicators.		S

2.2 IMMEDIATE OBJECTIVES -Please rate each objective, not each individual indicator.

#	Immediate Objective	Indicators (Include Target Value & Time Frame)	Actual Level Achieved (please provide brief description)	2002 Rating	2003 Rating [37]
		Assessment of transboundary populations of fish species and their relationship with sensitive habitats and current fishing practices (early 2003)	With a view to study the status and trends, a regional data compilation and evaluation exercise was undertaken through a team of national consultants as part of the formal reporting procedure for the BSC. Results were evaluated at a regional workshop to identify information gaps, establish a decision support system to be continuously operated, with the proper set of indicators for ecosystem based fisheries. Required interventions at the regional level were identified. As a pilot activity demersal resources were studied in depth. Coordination with international expert institutions (FAO-GFCM) for the inclusion of a regional coordinated stock assessment in GFCM work-programme was made and a proposal was drafted for submission by countries' fisheries authorities to FAO.		S
		Preliminary study on the evaluation of potential fisheries-free zones and Marine Protected Areas, their promotion with Black Sea governments and stakeholders; their incorporation into the Landscape and Biological Diversity Protocol to the Bucharest Convention	Protocol signed by Governments in 2002. Tacis is providing assistance for finalising a regional biodiversity strategy and action plan, which includes a SPA regime. Selection of areas of significance and formulation of measures for their conservation will be undertaken in the second half of 2003, possibly through a demonstration project.		S
		Training of coast guards etc. for their enforcement	A guidebook on Responsible Fisheries in the Black Sea to be published in all local languages and widely distributed to the local managers, fishermen and public is under preparation. Follow-up and further stakeholder involvement will be necessary in order to make an impact of on the local community involved in fisheries.		S
			OBJECTVE 8 - OVERALL RATING		S

2.2.1 IMMEDIATE OBJECTIVE ASSUMPTIONS & RISKS		
IO #	Assumption	Risk (measured as the probability that the assumption will not hold) 38
1	Environmental protection, in particular, nutrient reduction maintains its priority at the national level	S
1	Black Sea Commission works efficiently, long-term security in commitments is assured and correspond to the magnitude of the tasks	S
1	BSC Secretariat is functioning and fully staffed;	S
1	Governments support Advisory Groups and Activity Centers, and monitor their performance	M
1	BSC continues to integrate project objectives into its own work-programme	L
1	The harmonious integration of the project and its PIU into the overall strategy and implementation framework of the BSC.	L
1	The countries in the basin will establish a permanent mechanism for co-operation at an early stage	M
2	Financial and technological constraints in enforcement may reduce willingness to adopt new legislation;	S
3	Appropriate research institutions to undertake the task can not be identified/task is not undertaken properly	S
3	Required level of scientific expertise can be guaranteed and 2 marine surveys can be undertaken in a cost-effective manner	M
4	Governments support involvement of their own sectoral management structures in project implementation and cross sectoral integration; direct and effective working linkages with national sectoral bodies can be established;	S
4	Scientific and technical capacity available at the region can back-up management decisions and enforcement	L
4	Major policy reform is not possible in short term	M
4	A regional monitoring and assessment network and a data exchange system is available and functioning	L
4	No or limited experience with team-working (of sectoral and environmental experts);	S

2,4	Failure by one or more countries in contributing to data gathering/exchange in environmental and economic sectors	S
2,4	Efficient working linkages /networking can not be established to involve local administrations and stakeholders in project activities	S
2,4	Causes of impacts are not properly highlighted or quantified; Data/information for the completion of national/ region wide benefit/cost study is not available;	M
2,4	High level participation from key sectors can not be ensured	S
6	Existence of independently funded regional network(s) of NGOs acting autonomously NGOs/NGO networks may become dependent on donors' funding and can not sustain themselves	M
6	Continued/enhanced willingness of NGOs to participate in project implementation	L
6	Conflicts arise among the NGOs/NGO groupings competing for projects funded by donors	M
8	Willingness to conclude the fisheries convention for the Black Sea	M
8	Proposed policies are not compatible with ecosystem based fisheries	M
4, 7	Inadequate technical and managerial experience in environmental and sectoral integration	M
5,7	Problems in meeting the baseline costs	M
5,7	Inadequate support for incremental costs	M
2,4, 8	Slow decision-making and ratification processes and weak enforcement hinder adoption and implementation of legal and policy measures.	S
2,4,6,8	Social, legislative and institutional bottlenecks hinder full stakeholder participation	M
2,4,7,8	Absence of technical data and information needed for policy planning	S
2,4,7,8	Social, legal and institutional bottlenecks hinder sharing data/information freely through the PIU information base.	S
4,5,7,8	Decision makers are not convinced of correcting policy failures	S

3. IMPLEMENTATION ISSUES

Please list three main challenges experienced during implementation. Please describe adaptation approaches or remedial action either already taken or planned to solve them

1. Unavailability of data and information is a major constraint which limits the capacity of the BSERP to conduct the analysis/assessments and planning referred to in objectives 2, 4, 5, 7 and 8. Data and information gathered in earlier phases of BSEP are inaccessible in general.

a. Time series of data on the state of environment is not available and unreliable. At present, there is limited monitoring through out the region, and results are being reported to the BSC, however, sampling, analysis, and data processing methodologies have not been harmonized and quality assurance/control is missing. Integration of these different national monitoring programmes into regionally coordinated monitoring programme is required. However, this will require additional resources and time, and will hardly be available during Phase 1 of the project. The commitments have to be formalized, reliability of the results has to be assured, institutional responsibilities have to be clarified, and local resources have to be mobilized. This problem will be brought to the attention of the Project Steering Committee and the Black Sea Commission for their decision.

b. Access to socio-economic data and information is essential for quantitative analysis of the causes and impacts of eutrophication, and for planning of sectoral measures that need to be taken. This data should be made accessible for the project, and evaluated under the guidance of the sectoral authorities. The PIU does not have direct access to these authorities yet. There is a need for facilitation of this process by national project counterparts. To overcome this, an institutional framework is being created in the countries, which will closely involve national and coastal levels in the countries, as well as the Black Sea Commission and the PIU.

c. Data and information gathered in the past and to be collated by PIU during Phase 1 of BSERP or by the BSC PS have to be stored in inter-relational data-bases, and used for management. A strategy has been proposed by the BSERP and submitted to the attention of the BSC organs. Agreement on the data and information exchange strategy and action plan by the Project Steering Committee and BSC, and instructions as appropriate are required.

2. Regional objectives cannot be attained and benefits can not be harvested at the regional level unless all countries participate in project implementation in an effective manner and are accountable to each other. The institutional framework of the regional project is based on the network of institutions that take part in the work of the Black Sea Commission. Project implementation efficiency is critically dependent on the efficacy of the BSC as a regional decision making and executing organ. However experience shows that this requires specific measures which ascertain that the status and responsibilities envisaged for the Commission and its subsidiary bodies comply with the duties expected of them. Specific measures to introduce inter-sessional execution and delivery, to assure national and regional accountability, to monitor performance, and burden sharing are required. Holding annual meetings of Contracting Parties; adoption of Terms of References for National Project Coordinators and National Focal Points for Advisory Groups and their assignment accordingly; formalizing reporting requirements at the national and regional level; differentiating and clarifying management responsibilities against scientific/technical advise for Focal Points and Regional Activity Centers; justifying the qualifications of Regional Activity Centers against specific Terms of References, confirmation of administrative and financial support provided to Regional Activity Centers by the Governments are some possible measures that could be taken. Experience until now has shown that without these measures, concerted regional actions can not be undertaken, country ownership and stakeholder involvement can not be assured. For example, staggered processes for the organization of the work of Advisory Groups and Activity Centers hinders effective project support for activities which are intended for execution and further sustenance by these regional structures.

3. Coordination with some partners was not successful to the desired extent. For example, no linkages were established with the European Commission which is expected to be dominant factor in the three accession countries as well as others for major environmental and sectoral reforms and programmes. This comment is not applicable to the DABLAS Task Force which is primarily involved in promoting investments or to the Tacis however. A more effective dialogue may possibly be facilitated at a higher level. Also certain accession countries may wish to assume a leading role for activities aiming at sectoral reforms (Immediate Objective 4) based on their experiences to comply with the requirements of the European Acquis. Similarly, the coordinating arrangements with UNEP suggested as the Implementing Agency for Objective 2 on the methodology and organization still yet

to be established. Mutual agreement on the methodologies applied, co-financing, staff inputs, consultancy requirements, timing of activities need to be agreed at the Steering Committee Meeting.

4. LESSONS LEARNED/GOOD PRACTICE

Please describe briefly the key lessons and examples of good practice that have resulted from project implementation during the year. .

1. Since the start-up of the project, work-programme coordination and cost sharing arrangements with the Permanent Secretariat and the Tacis Project Team located within the same premises with the PIU have gradually improved. Involvement of the Permanent Secretariat of the Black Sea Commission as well as the Tacis team (and vice versa) in project planning and implementation helps better coordination and burden sharing at the project level. This is an example that justifies the project strategy to provide support to the Black Sea Commission, the regional legal coordinating body as the basic means of providing support to the individual Black Sea coastal states for their efforts to protect the Black Sea. Further strengthening of the current practice will help better mainstreaming of regional objectives into different interventions by donors and beneficiaries, cost effective use of financial resources available, and to enhanced institutional and financial sustainability of the regional initiative.

2. For designing the surveys a small group of scientists (Advisory Board) who were well informed on the specific scientific uncertainties preventing a clear understanding of the linkages between the causes and impacts of eutrophication in the Black Sea were nominated by the PIU to identify research topics, expected outputs, required format for the proposals and the evaluation criteria. Based on this a call for proposals on the scientific work to be undertaken was prepared; and only after this all-scientific groups in the region were invited to take part in the process. The members of the Advisory Board, after reviewing all proposals and selecting the scientific teams which will execute the surveys, took part in the detailed design process for the surveys conducted by the wider study group- although in general they did not take part in the proposals to be implemented. In summary, a cascaded planning approach was taken. As a result it was it was possible to mainstream the original objective of 'reducing management uncertainties' through the cruises against pure 'scientific inquiry' .The pre-set topical issues, scientific quality criteria and the transparent process for evaluation reduced the potential for conflict of interests between the numerous scientific groups. This lesson serves as a good example for the need to clearly differentiate specific roles expected from various partners; for example decision making /implementation role versus scientific advice and taken into consideration while planning specific measures to enhance the efficiency/efficacy of the Advisory Groups and Regional Activity Centres. Second lesson from the same experience is the need for enhanced transparency as a means of reducing possible conflicts.

5. SYNERGIES, DEMONSTRATION AND CATALYTIC EFFECTS

5.1 Have there been any interactions/synergies with similar projects in the country/region during project preparation and/or implementation?

At the Black Sea scale there are regular contacts with the Tacis project at the programmatic and operational level. Programmatic and operational linkages have been established and formalized with the Danube Commission and the GEF Danube Regional Project in the wider basin. Similarly the GEF Dniepr project team is regularly contacted for harmonized planning and implementation of monitoring and assessment. Cooperation with the Mediterranean Action Plan (GEF Bio-SAP) at the technical level (expertise). The managers of the three agricultural sector projects in the region were invited to the project inception workshop and one participated. Here it should be noted that their participation necessitated BSERP funding. It is suggested that necessary funding and performance criteria should be incorporated in the projects executed by all GEF IAs in the region, in particular under the Strategic Partnership. The initiative to facilitate interaction between these projects (WB web-site) is remarkable and may possible be extended to share the databases (country and WB consent needed). Similarly access to sector analysis and supporting data) made by different IAs will considerably assist the accomplishment of project tasks.

5.2 Describe efforts to disseminate lessons and transferring knowledge that have had or are expected to have demonstration and replication effects.

A workshop was organis ed in order to transfer the knowledge and lessons gathered outside the region (US, Danube, UK. Pacific) for modeling of contribution of point and diffuse pollution (including through atmosphere) sources to overall nutrient budgets which will eventually be used for elaboration of reduction strategies and river basin management plans. A demonstration project is under preparation.

Also staff input and coordination with Ukraine is continuing with a view to develop and implement a MSP (for submission to the GEF by Ukraine) to test the application of a number of low cost nutrient elimination technologies. If implemented these will have a demonstration effect all through the Black Sea region.

5.3 How has the project contributed to bringing about policy or legislation changes in the country, changes in the Implementing Agency or other donor strategies- or private business practices- to give stronger emphasis to global environment issues?

The results of the PDF-B phase and the approval of the BSERP Phase 1 has largely contributed to allocation of funds by the European Unit to nutrient reduction in the Tacis eligible countries in the region. In line with the recommendations made in earlier GEF financed projects and PDF B phase have contributed to the conclusion of a Memorandum of Understanding between the Black Sea and Danube Commissions for setting common objectives and coordinated implementation. To support this initiative a Task Force (DABLAS) was established and is facilitating project preparation and international donor coordination for project financing. Project is providing direct technical and financial support to the work of the Joint Technical Working Group that will develop harmonized monitoring systems, common assessment of the ecological status of inputs of nutrients and other hazardous substances, compatible reporting formats for input loads and the assessed ecological status, and formulate of appropriate measures to limit discharge of nutrients.

6. PARTNERSHIP STRATERGIES

Please mention any partnerships/strategic collaboration agreements established with other institutions, civil society organizations or the business community in order to achieve project objectives. If the project works with a private –for profit- organization , please also respond to questions on Annex I at the end of this questionnaire.

A. An Inter-agency agreement is drafted and submitted to UNOPS and IAEA for subcontracting IAEA, in particular the Marine Environment Laboratory in Monaco, to provide the following consultancy, training, and procurement services,
capacity and needs assessment & QA/QC support:

- Visit laboratories designated to form the regional marine laboratory network and evaluate their capacity to undertake the analyses prescribed in the monitoring programme.
- Conduct 3 inter-comparison exercises for 6 to 10 laboratories.
- Training in analytical chemistry.
- Conduct QA/QC and methodological training with respect to selected analyses prescribed in the monitoring programme in six laboratories designated;
- Advise on the requirements for the procurement of equipment and consumables for the pilot monitoring programmes.
- Procure equipment and consumables.
- Consultancy with respect to cruises
- Advise on cruise planning and attend ISG meetings as necessary
- Participate in one cruise (30 days)
- Provide technical assistance and advice on the procurement of equipment and consumables for the cruises.
- Procure equipment and consumables

B. A Letter of Agreement was signed between the PIU and the Romanian National Institute for Marine Research and Development on cost sharing for procurement of equipment for the National Focal Points and Activity Centers (procurement of a Server for the NIMRD (6500$ by PIU 593 $ by NIMRD)

C. TACIS Assistance for BSEP has contributed to the organization of the Workshop for Responsible Fisheries and the Case of Demersal Fish Sources by cost sharing participation of 5 experts/government specialists from Georgia and Ukraine. (5,942 Euro)

D. Letter of Agreement between PIU and Turkish Marine Research Foundation, TUDAV (not-for profit- NGO) for co-sponsoring the Workshop for Responsible Fisheries and the Case of Demersal Fish Sources. TUDAV provided scientific and financial support to the Workshop (see below).

7. RESOURCES LEVERAGED

Apart from the co-financing contributions reflected in the budget, how has the project mobilized additional financial resources for either addressing global environmental concerns or financing baseline activities during implementation? Please indicate the amounts and sources of leveraged resources.

A Letter of Agreement was signed between PIU and Turkish Marine Research Foundation, TUDAV (not-for profit- NGO) for co-sponsoring the Workshop for Responsible Fisheries and the Case of Demersal Fish Sources. TUDAV contributed to local transportation costs and publication of proceedings of the scientific symposium held (5,000$) as part of the workshop.

The following institutions provided technical expertise (staff time free of charge) to the Kamchia Workshop on Modeling Nutrient Exports and covered travel costs of their experts: UNESCO IOC (2 experts); U.S. Army Engineer Research and Development Center, European Research Office (1 expert); University of Kiel, Germany, Institute of Marine Research & Danubis Project (1 expert);

The following organisations provided technical expertise (staff time free of charge) to technical meetings and workshops: Mediterranean Action Plan /Regional Activity Center for Specially Protected Areas (1 expert) to Joint

Meeting of the Advisory Groups on Fisheries and Biodiversity; the FAO-GFCM (2 experts) to the same meeting and the Responsible Fisheries Workshop.

8. SOFT ASSISTANCE
Soft assistance contributes to the outcome and/or outputs. This section aims to identify activities or issues conducted not envisaged in the workplan yet with concrete results ensuring progress towards the outcome. This section of the PIR/APR contribute to the CO reporting section on "advocacy and policy dialogue"and allows the country office and the project to work in the same direction in advocacy and dialogue. If soft assistance is not an issue for the project or too sensitive to address, this section can be left empty

9. MONITORING AND EVALUATION		
Type of Report	*Date (DD-MMM-YR)*	*Report Available/comments*
Field Visits		
Annual Project Review		
Tripartite Review	18-19 Sept 2003	Not yet available
Mid-Term Evaluation		
Final Evaluation		

10. FINANCIAL INFORMATION- From project start-up to date of this report.	
Cumulative planned disbursement ($millions)	4.0
Cumulative actual disbursement ($millions)	2.0
Timing of disbursements (percentage of planned vs. actual expenditures)	50%
Date/Period of First Disbursement	Jan 2002

11. PROCUREMENT DATA

Note : For projects or project components executed by UNOPS this section *must not* **be filled in - data will be provided by UNOPS headquarters-.**

Please report the **US$ value** ***(in Thousands)*** of UNDP/GEF Payments to Supplying Countries for Procurement in GEF Donor Countries. Please enter Project **expenditure** from project start up to the date of this report into the matrix against the donor country **supplying** the personnel, sub-contract, equipment and training to the project. Please report only on contracts over US$ 2000.

Supplying Country (only donor countries)	Personnel (in US$)	Sub-contracts (in US$)	Equipment (in US$)	Training (in US$)	Total (in US$)
UK	160		37		197
France	98				98

12. Audit Requirements for Government and NGO Executed Projects

The UN Board of Auditors has established that an annual audit is necessary for all Nationally Executed and NGO Executed GEF projects, whose expenditures for the calendar year (January - December) exceed $20,000. Expenditures below that amount are subject to normal UNDP audit procedures, which is once in the project's lifetime.

According to the above regulations, please indicate:

- For which calendar year's expenditures, an audited financial statements have been issued;
- Which will be next calendar year for which an audit will next occur:
- Date of Submission to HQ UNDP Office of Audit and Performance Review, National Execution Audit Section:
- If the report has not been received from the Government or NGO, please comment on actions taken by the Country Office to ensure compliance.
- If the Audit Report contains negative comments, please indicate what actions have been taken by the Government or NGO.

13. NGO INVOLVEMENT

PLEASE ENTER THE FOLLOWING INFORMATION INTO THE TABLE BELOW FOR EACH NGO INVOLVED IN THE PROJECT:

Full Name: Please list the full name of the NGO.
Acronym: The official initials of the NGO's name.
Type: *Please refer to PIR instructions for "Type" classification.*
Role: *Please refer to PIR instructions for "Role" classifications*.
Activity: Brief description of services provided by NGO.
$ Value: USD $ value ***(in Thousands)*** of contracted project services assigned to NGO (if applicable).

Country	*Full Name (Do not give acronym only!)*	*Acronym*	*Type*	*Project Stage*	*Role*	*Activity*	*$ Value of contracted services*
Bg	Black Sea Coastal Association, Varna	BSCA	NGO	Implementation	provider of project services	Promotion of Constructed Wetlands for Wastewater Treatment in Small Coastal Communities in Bulgaria, Public outreach	12,640
Bg	Greener Bourgas Foundation		CBO	Implementation	provider of project services	Promotion of organic (chemical-free) agriculture and farming Production of visual, educational materials for the general public and Farmers	13,000
Regional	Black Sea NGO Network (BSNN)	BSNN	IGO	Implementation	provider of project services	Black Sea wide NGO Networking toward Recovery of Black Sea Ecosystem, Capacity Building, Public outreach	29,989
RF	Sochi Branch of the Russian Geographic Society		NGO	Implementation	provider of project services	Recovery of Kolkhida-type flora and fauna in local wetland and legalising the protection status of the site as a nature monument., Production of visual educational materials for authorities; advocacy	5,050
RF	Environmental Center of Sochi		CBO	Implementation	provider of project services	Wetland Education for Children; Production of visual, educational materials students	10,610
RF	Sports and Health Society "Sailing Academy"	Sailing Academy	CBO	Implementation	provider of project services	"The Green Filter for the polluted drains"; Production of visual educational materials for schools, local authorities and general public;	13,566

Country	*Full Name (Do not give acronym only!)*	*Acronym*	*Type*	*Project Stage*	*Role*	*Activity*	*$ Value of contracted services*
Ro	G.E.S.S. -- The Group for Underwater and Speleological Exploration	GESS	NGO	Implementation	provider of project services	Black Sea Public Awareness Project; Production of visual, educational materials for the general public and students	21,565
Ro	UNESCO Pro Natura -- Association for Action in Protected Areas	UNESCO-Pro Natura	NGO	Implementation	provider of project services	Black Sea Basin Environmental Issues On-line; Production of visual, educational materials for the general public and NGOs	12,440
Ro	Prietenii Pamantului (Earth Friends)		NGO	Implementation	provider of project services	Water is Life - production of visual educational materials for schools, local authorities and the general public; Promotion of organic (chemical-free) agriculture and farming	13,260
Ro	Mare Nostrum	MN	NGO	Implementation	provider of project services	Voluntary Program in the Romanian coastal watershed to control and reduce agricultural pollution; Production of visual, educational materials for the general public and students	21,069
Tr	Turkish Environmental and Woodland Protection Society, Istanbul	TURCEK	NGO	Implementation	provider of project services	Coordinated Public Awareness and Participation Project of the Turkish Black Sea NGOs; Production of visual educational materials for schools, local authorities and general public Advocacy	18,240
Tr	The Black Sea Environmentalists (Trabzon)	KARCEV	CBO	Implementation	provider of project services	Raising the public awareness on the effects of pollution on environment, human health and wildlife in Trabzon; Production of visual educational materials for schools, local authorities and	12,000
Ukr	Regional Black Sea NGOs Network	BSNN	NGO	Implementation	provider of project services	Clean Water (Preparation and Implementation of Pilot Project on Wetland Restoration at Lower Dnieper); Restoration and conservation of wetlands	10,000

Country	*Full Name (Do not give acronym only!)*	*Acronym*	*Type*	*Project Stage*	*Role*	*Activity*	*$ Value of contracted services*
Ukr	Institute of Ecology INECO – South Branch	INECO	NGO	Implementation	provider of project services	Promote Cost-effective water treatment facilities for small coastal communities in Ukraine; Low-technology waste water treatment Public outreach	9,250
Ukr	Odessa Branch of the International Socio-ecological Union		NGO	Implementation	provider of project services	Restoration and conservation of wetlands; The Revival of the Dniester mouth region – Pledge of decrease of a eutrophication level in a northwest part of Black Sea	9,353
Ukr	Sevastopol Environmental Organisation "SECAMP-2000"	"SECAMP -2000"	CBO	Implementation	provider of project services	Public Information Campaign "Stop Black Sea eutrophication syndrome -- a role for everyone"; Production of visual educational materials for schools, local authorities and general public	9,998
Ukr	Fund of Natural Sciences and Ecology (Odessa)		NGO	Implementation	provider of project services	Series of video films "The Life of the Sea Coast"; Production of visual educational materials for schools, local authorities and general public	12,510
All providers of project services (total contracted amount)							234,540
	Worldwide Fund for Nature	WWF	IGO		non-compensated policy or advisory role	Marine and coastal biodiversity conservation,	
	Wetlands International	WI	IGO		non-compensated policy or advisory	Directory of Black Sea Wetlands, recommendations for wetland conservation in the Black Sea region	

PLEASE INDICATE FACTORS THAT HAVE FACILITATED OR CONTRIBUTED TO NGO INVOLVEMENT:

Previous assistance from GEF has contributed to an increased awareness on the problems of the Black Sea among the local communities. Also it helped in voluntary gathering of local or national NGOs to jointly undertake actions for safeguarding the Black Sea. Other donors also supported regional initiatives. As a result, a number of regional NGO networks were founded. (ie Black Sea NGO Network, International Black Sea Partners). On the other hand, the existence of Regional Environmental Centers established through the process of Environment for Europe (REC Budapest, REC Caucasus) is an additional factor that contributes to wider outreach.

Web-based communications have a certain potential (see constraints below as well) to further involve NGOs. The NGO registry, and the e-groups discussion platform made available on the web page of the BSERP are notable in this respect.

PLEASE INDICATE FACTORS THAT HAVE CONSTRAINED NGO INVOLVEMENT:

The current portfolio of small projects was identified on the basis of the projects submitted to the Project Implementation Unit during the PDF-B phase. Although a large number of projects were submitted at that time, discussions during the BSERP Inception Workshop (May 2002) indicate that a comparatively limited number of NGOs received and were able to respond to the announcement. Since there was some delay in the starting up of the BSERP, updating of projects became necessary. In order to follow up with the originally applied application/selection process, a closed call was made among the NGOs, whose projects were marked as high/medium priority, also asking them to mainstream with the other activities specified in the Project Document. Out of the 25 NGOs only 17 resubmitted their revised proposals.

In general, the capacity of NGOs to formulate and implement projects is rather weak. Out of the very many NGO project proposals submitted, only a few were partially/totally satisfying basic eligibility principles such as proper linkages between the objective and the activity/output, or compliance with GEF objectives, or efficient budget management; hence were not approved. The PIU is currently developing (with RECs) a region-wide capacity building activity to provide training to the NGOs in the region for improved project cycle management.

Language is a basic problem hindering wider outreach and participation. To overcome this, BSERP is encouraging clustering among local NGOs and CBOs. Also translation of documents intended for wider public information into local languages is facilitated (published or posted on web) .

Limited access to web based communications is another factor constraining possible direct involvement of NGOs and CBOs. Facilitation of this access through the small projects funded under the BSERP portfolio is therefore encouraged.

In order to facilitate access to the BSERP small project grants by a larger number of NGOs and CBOs, and to enhance the involvement of the NGOs and other stakeholder groups in project related activities, the BSERP-PIU has elaborated a draft strategy for supporting small projects as well as a draft communications strategy which is currently being under discussion with the NGO community. (www.blacksea-environment.org)

Annex 1
Private Sector Involvement in UNDP-GEF Projects under Implementation

As part of the PIR process it is important to ascertain the degree to which UNDP-GEF projects work with private (for-profit) companies beyond that of the traditional sub-contracting relationship. This refers to companies, which contribute to a project as opposed to receive financing from it.

A. If the project is benefiting from such **private sector resources** please answer the following five questions for each company involved in the project.

1. What is the name and type of company (local, national, multi-national)?

2. What economic sector does the company work in (e.g. tourism, fisheries, forestry, agriculture)?

3. What resources/benefits is the company bringing to the project and how do they help achieve the project objectives? This could include:

    - Reduce industrial impact on the environment such as pollution, deforestation and habitat loss and exhausting natural resources through adopting best practices and working more closely with governments and local communities.
    - Advice on viability of a sustainable livelihood particularly during the early stages of project implementation.
    - Support for community development through the provision of industry unique technical and commercial (marketing, financial planning) expertise, transfer of technology such as old equipment, investment in infrastructure to assist micro-enterprise development, access to existing markets and provision of new ones through offering to purchase goods from project beneficiaries
    - Engage in national policy dialogue with governments to inform on sector planning which will facilitate development
    - Provide small to medium grants as co-financing either specific activities as agreed in the project document or for general project budget.

4. How is the company being involved in project implementation (being consulted as part of project activities, working jointly on project activities, participating in steering committees, carrying out parallel activities with project beneficiaries)?

5. What benefit is the company deriving from contributing to the project?

B. **If the project has not involved companies** but could benefit from their resources please explain, given sufficient resources, **what could be potentially done within the project to develop such partnerships.**

Appendix M STAP Review

Donald M. Anderson

February 27, 2004

Background

Until the 1960s, the Black Sea was known for its productive fishery and scenic beauty, and as a resort destination for millions of people. Since that time, massive over-enrichment of the sea by nitrogen and phosphorus from agriculture, municipal, and industrial sources has seriously degraded the ecosystem, disrupted fisheries, reduced biodiversity, and resulted in billions of dollars of economic losses to regional economies. Pollution from 17 countries has created this transboundary water quality problem. Through two GEF assisted projects, the affected countries have identified the excessive release of nutrient pollution from agriculture, municipal, and industrial sources as the top priority problem and release of toxic substances and loss of benthic habitat as additional priorities. The Black Sea Ecosystem Recovery Program (BSERP) was formulated to address these problem areas.

The overall objective of the BSERP is to support participating countries in the development of national policies and legislation and the definition of priority actions to limit the discharge of nitrogen and phosphorus to the Black Sea to levels below those of 1997. Specific objectives of the BSERP Phase 2 project are: 1) to reinforce regional cooperation under the Black Sea Convention; 2) to set up institutional and legal instruments and to define priority actions at regional and national levels to assure sustainable coastal zone management; and 3) to protect coastal and marine ecosystems and habitats in order to secure sustainable use of coastal and marine resources.

Scientific and technical soundness of the project

The BSERP is based on a solid scientific assessment of the nature and causes of ecosystem and water quality degradation in the Black Sea. This knowledge was collected and synthesized during the formulation of the Black Sea Action Plan. In particular, a highly technical Transboundary Diagnostic Analysis (TDA) of the Black Sea was produced that identified the root causes of Black Sea degradation and suggested actions which could be taken to address them. The BSERP was formulated to address the three highest priority transboundary problems of the Black Sea (namely eutrophication, discharge of toxic substances including oil, and loss of critical benthic habitats and wetlands).

Although the stated goal of the BSERP is to reduce nutrient loads to levels below those of 1997, the program's long-term development goal is to take measures that "permit Black Sea ecosystems to recover to conditions similar to those observed in the 1960s". This is a questionable goal, since the data and knowledge of ecosystem structure and health in the 1060s was undoubtedly limited, and it will indeed be difficult to achieve a target that is so tenuous and uncertain. Despite

this reservation, the goal is an admirable one, and in the absence of a more rigorous alternative, should be maintained.
I offer the following specific and general comments on the Phase 2 Brief of the BSERP.

Scientific Expertise.

Under International Consultants (Table 25), I see no provision for a consultant with expertise in eutrophication or the role of nitrogen or phosphorus in phytoplankton dynamics. Likewise, in Table 20, I do not see a subcontract specified for any oversight of nitrogen and phosphorus issues. I do not know the specific background of the new Project Coordinator in this regard, and wonder if he or she has demonstrated expertise in this central topic. If not, it would seem that some review of the nutrient data to be obtained from the survey cruises and the various national assessments and historical analyses might be needed. Likewise, if numerical model runs are conducted (as suggested below), an expert familiar with phytoplankton nutrient dynamics would be invaluable in interpreting the results.

Some of the issues to be considered as data become available, and as intervention strategies are considered, are, for example, what is actually limiting phytoplankton growth in different areas of the Black Sea. In some eutrophic waters, nitrogen and phosphorus levels are so high that nutrients do not limit phytoplankton growth. Light or other environmental factors become the critical determinant of the level of algal biomass achieved. In those circumstances, reducing nutrient inputs may not result in a decrease in primary productivity or algal biomass. In an analogous fashion, given the nutrient loadings presented in the Brief, it may well be that in nearshore waters of the Black Sea, phosphorus is the nutrient that will be depleted first, thereby limiting further development of the phytoplankton population, despite the presence of an overabundance of nitrogen. The implications of this are profound, since strategies to reduce nitrogen might not have any appreciable effect on algal biomass, (at least in nearshore receiving waters) whereas efforts to reduce phosphorus (which is typically much less costly to remove from wastewater treatment plants) might have direct positive effects. In such a situation, more environmental benefit (or a more immediate environmental benefit) might accrue to one particular nutrient reduction strategy compared to another.

Another issue that may influence the net effect of pollution control strategies is the supply of nutrients to coastal waters from natural mechanisms, such as regeneration from bottom sediments. It would not surprise me to learn that the amount of phosphorus released from bottom sediments in the Black Sea is roughly equivalent to that supplied in river runoff, as that has been observed in other parts of the world. Here again, pollution reduction strategies may not have the effect that is anticipated. Yet another factor to be evaluated is the form of the nitrogen or phosphorus entering the Black Sea. It is becoming increasingly apparent that urea and other forms of organic nitrogen are preferred nutrients for some forms of algae, including a number of species that are toxic or harmful. In this context, not only should monitoring programs be including organic nutrients in their analyses, but research programs should consider the relative importance of the different forms of the major nutrients. These are examples of a number of issues that an expert in phytoplankton and eutrophication could assess, to the great benefit of this project.

Another apparent gap in this program relates to the value of numerical models in managing water quality. A coupled, physical/biological model of the Black Sea would be of great utility in assessing the relative importance of different nutrient reduction strategies, and in developing an understanding of the mechanisms underlying observed ecosystem and water quality conditions. Presumably, such a model exists for the Black Sea, but I see no mention of it in this Brief, nor do I see any indication that the output from such a model is being used in the decision-making process. To be of use, the model would have to be calibrated against extensive field observations, some of which are being planned through the cruises and monitoring activities of BSERP. I would ask the PIU to clarify whether numerical models are being used in this project, and if so, how BSERP is utilizing their data. There is mention of a model to be used for "rapid assessment methodology" (though I am not sure what that actually means), devised by the University of Plymouth. This is an activity of the BSC that involves the collection of data on nutrient loads to surface and groundwater from domestic, industrial, agricultural, and atmospheric sources. From what I understand, however, these values are not being used to drive a coupled hydrodynamic/water quality model, which is what I am advocating. Such models have been used to great utility in projects dealing with regional pollution issues in Massachusetts Bay (USA), San Francisco Bay (USA), and Hong Kong, to name but a few. This would be one activity that the scientific Advisory Board could foster in its future deliberations on funding for research programs. The needs of modelers should also be taken into consideration in designing the research cruises planned for Objective 4.

Data Consistency and Management.

A critical aspect of any regional project of this type is the consistency and compatibility of data. This need has been recognized by BSERP, the BSC, and other organizations involved in monitoring Black Sea water quality, fisheries, and ecosystem health. It would appear that the scientific Advisory Board established by the BSERP is in the appropriate position to push for standard data formats and measurement methodologies. It was not clear, however, whether this important aspect of coordination was being required of each of the BSERP research projects – either by the PIU or the Advisory Board. If not, then a data management policy for the research projects and cruises should be implemented by the PIU.

At the monitoring level, it is clear from the activities planned for Objective 4 that method and data standardization are recognized priorities for BSERP. This will, however, be a considerable challenge, given the different capabilities and political and economic conditions of the countries involved. On the positive side, I note that the basic approach for integrated monitoring and assessment (BSIMAP) has been established by the BSC, and that a pilot monitoring program for environmental status indicators was recommended by the Joint Technical Working Group of the BSC. This is a major step forward – but this effort is apparently only at the planning stage. The challenge will be to get the beneficiary countries to launch sustained monitoring programs using these procedures. It needs to be clarified in the Brief how this transition to operational modeling will be accomplished, especially given the demands of the EU with respect to water quality certification. Three of the six countries participating in the BSERP will need to establish monitoring programs that are acceptable to the EU, and thus might not want to commit to a BSC program that uses different methods or has different sampling objectives.

Adequacy of technologies.

Not a lot of detail is provided in the Brief on the types of strategies or technologies to be used to reduce nutrient pollution, or to build up fisheries or ecosystem health. In fact, the progress report states that "The project suffered a delay in reaching an agreement on the methodology to be applied for …….. formulating measures for the reduction of nutrients and hazardous substances." The use of marine protected sites is offered as an example of a strategy to be considered for habitat restoration and fisheries enhancement, and this technology should be encouraged. Even though comparable detail is not provided in the context of reduction of non-point source pollution from agriculture, for example, I am hopeful that appropriate technologies will be utilized, as these are generally included under the heading of Best Agricultural Practices, which will be among the training options to be offered by the BSERP. In this regard, none of the technologies needed to achieve the pollution reduction objectives of the BSERP are technologically challenging or require technical innovation before implementation. This is a positive. The major obstacle to implementation will be the commitment from the Black Sea riparian countries and their farmers to this type of environmental policy.

Institutional Arrangements.

A diverse array of working groups, commissions, projects, and countries are all involved in one way or another with the focal issues of the BSERP. Accordingly, a major project requirement is for effective networking and coordination. Indeed, I attribute part of the slow progress on a number of planned activities in Phase 1 of this project to the time and effort required to establish working relationships with numerous programs, commissions, secretariats, and working groups. This was surely a challenging task, especially since the Permanent Secretariat of the BSC was only established in 2000. One of the major accomplishments of Phase 1 of the BSERP is the establishment of a close working relationship with the BSC. The BSC was formed to implement the Convention on Protection of the Black Sea Against Pollution, and is thus the primary entity in regional efforts to control pollution. By proactively working with the BSC at various levels, (e.g., with the Secretariat or with BSC Expert Groups) the BSERP is privy to current issues and activities, and can thus provide directed assistance and input to further the development of that work. The establishment of a Permanent Secretariat for the BSC is clearly a major positive factor to help the BSERP better focus its participation in regional pollution control efforts.

Another positive on the institutional or organizational aspect of this project is the effort to merge BSERP activities with relevant legislative frameworks. A good example is the recognition of the EU Water Framework Directive (WFD) as a guide or framework for specific activities of the BSERP. By linking project activities within Phase 2 closely with the WFD, the BSERP can strengthen the sustainability of its project activities.

At the national level, the BSERP recognizes the need for inter-ministerial consultation and coordination. The involvement and cooperation of all relevant governmental bodies, in particular the Ministries of Environment, Economy, Agriculture and Foreign Affairs, are given a high priority in Phase 2, as should be the case.

In this context, a major concern is the commitment of the six beneficiary countries at the national and regional levels. Economic and political forces will cause this commitment to fluctuate, and this is likely to reduce project outputs. Nevertheless, actions such as the support of the Permanent Secretariat of the BSC or the construction or upgrading of wastewater treatment plants suggest that pollution control policies will continue to receive sufficient priority among these countries to warrant optimism for BSERP project success and sustainability.

Global Environmental Benefits and GEF Relevance.

The Black Sea is a major water body that directly or indirectly affects dozens of countries as well as adjacent seas and oceans. This project thus has clear global environmental benefits. It also fits perfectly with the strategic thrust of the GEF IW program. Indeed, it is hard to imagine a project that has more relevance to the GEF mission. In particular, the BSERP will assist six countries to better understand the environmental issues of their international waters and to work collaboratively to address those problems, it will build capacity in pollution reduction, water quality, coastal zone management, and coastal oceanography, and will implement measures that address the priority transboundary issues - eutrophication, discharge of toxic substances, and loss of critical benthic habitats and wetlands. The BSERP has the potential to be a jewel in the GEF crown.

Regional Context.

Here again, the BSERP fits perfectly with the multi-national scope of GEF IW projects. Six countries are directly involved in the project, but a total of 17 are part of the Black Sea watershed, and thus are linked to the policies and activities of the project.

I was pleased to see a recognition of a common problem in projects of this type – that activities conducted by international experts without close integration and cooperation with experts from the involved countries are often not given serious consideration, and recommendations often go unheeded. The BSERP brief states that all project components will be carried out in close cooperation with the BSC's expert bodies and that highly qualified national experts/consultants from the Black Sea riparian countries will be fully involved as well. It is important that this policy be continued in Phase 2, even if this involves a shift of resources from other project elements.

Replicability of the Project.

Many of the activities and experiences of this project are relevant to similar projects in other parts of the world. Numerous countries share water bodies or coastlines, and many of these are threatened by eutrophication and toxic substances, especially in developing parts of the world. Just as the BSERP project will benefit from water quality policies established among member countries of the European Union, other countries or regions can benefit from the policies, procedures, and legislation formulated by the BSERP for coordinated pollution control.

Sustainability of the Project.

Sustainability remains a significant unknown for the BSERP, but as long as expectations are not too high and time-frames too short, the benefits from this GEF project should be long lasting. The six countries involved have already shown a reasonable level of commitment to environmental control, despite difficult economic and political situations. They are providing financial support for the BSC Permanent Secretariat, are contributing significant in-kind support in terms of wastewater treatment construction and upgrades, are conducting monitoring of the coastal waters to provide baseline data, and are willing to endorse the BSERP project.

These multi-country financial arrangements, such as the support for the permanent Secretariat, can contribute to long-term sustainability. The BSERP has also plans to involve the private sector, inter-governmental financial institutions, and other entities in project implementation, and this should also lead to a long-term commitment to the objectives and ideals of the program. An underlying reason for my optimism is that the Black Sea is widely recognized to have been severely damaged by the countries that surround it, and the negative effects are clear, dramatic, and easily linked to substantial economic losses. These are the factors that attract public attention, as well as the attention of politicians. Given this, it is highly likely that efforts to clean up the Black Sea will be sustained for many years, although the nature and rate of those efforts will likely fluctuate significantly with political and economic conditions.

In this context, it is of note that the BSERP is itself a continuation of the GEF Black Sea Environmental Program. The BSERP also builds on the findings and recommendations of the Declaration on the Protection of the Black Sea, the Black Sea Strategic Action Program, national Strategic Action Plans for rehabilitation and protection of the Black Sea, and several other programs and task forces.

Linkages to other Focal Areas.

The most obvious linkage between the BSERP and other GEF focal areas is in biodiversity. It is well established that the environmental degradation of the Black Sea (from pollution, over-fishing, and other human activities) has drastically affected biodiversity at all levels of the region's ecosystems. Ecosystem stress has been significant, and the outlook for the future is ominous as the regional economies improve.

There is also a linkage to the GEF land degradation focal area, as some of the agricultural practices that lead to enhanced pollution of the Black Sea are also degrading the land, such as through increased erosion, and build-up of minerals and nutrient salts in soils.

Stakeholder Involvement.

Public communication and involvement are emphasized heavily in the BSERP, and this is as it should be. A Public Information specialist will be part of the core PIU team, and numerous planned activities will educate the public about the nature of the pollution threat to the Black Sea and the steps that can be taken to alleviate it through time. This type of public education has proven to have a long-term payoff in other projects of this type. Further stakeholder involvement will occur through small grants to NGOs.

Capacity Building.

Capacity building is an important aspect of the BSERP. It is evident in plans for training courses, in development of monitoring program design, support of a regional information system and GIS database, and other related activities. I was concerned to read that there was a delay in the "Black Sea Train Sea Coast" course development for agricultural management of nutrients in coastal regions. This seems to be a major element of the effort to reduce agricultural nutrient pollution, yet the BSERP has not made much progress in this direction at all. The PIU should clarify the nature of the delay in Phase 1, and the steps that will be taken in Phase 2 to rectify the situation.

Innovativeness of the Project.

The BSERP approach to control of eutrophication and coastal degradation is innovative because it does not simply target the pollution sources, as is often done in other programs. The BSERP approach is to tackle the problem in a holistic manner, recognizing that resolution of the problem is not simply a matter of reducing nutrient loads, but involves protective measures to help vital ecosystems become re-established, fisheries and other living resources to be exploited in a sustainable manner and chemical contamination to be controlled. This approach is certainly more challenging as well, as it involves many different constituencies, overlapping agency jurisdictions, and multiple approaches to mitigation.

General Comments

Presumably as a result of the latest APR/PIR Review (April 2003) which rated Phase 1 progress as "unsatisfactory", the Project Coordinator was replaced in July 2003. The implementation schedule of BSERP activities was then revised and a new spending schedule for project funds developed. Since this major project reorganization occurred only 7 months ago, it is very difficult for this reviewer to assess whether this change will lead to better project implementation and satisfactory progress in Phase 2. Project oversight was apparently deficient, and one hopes that a new Project Coordinator or CTA will remedy the situation. However, I would like the Brief to acknowledge past problems, and specifying steps that will be taken in Phase 2 to better assess and monitor progress during project execution. Paragraph 208 specifies a review structure composed of a Project Steering Committee, a Tripartite Review (TPR), a GEF Project Implementation Review, and an External Evaluation. Presumably, this structure has not changed from that used in Phase 1, but from an external perspective at least, I would argue that this system did not work. Will anything new be done to increase oversight, or monitor progress? For example, what can the project Steering Committee (SC) do to better monitor progress? In paragraph 200, the text suggests that two meetings per year will be held for the SC to review progress on the basis of a report prepared by the CTA. Is this sufficient? What assurances are there that the SC will be able to identify shortfalls in project output in Phase 2, when this did not happen in Phase 1? Alternatively, will the Tripartite Review or the Project Implementation Review be able to detect shortcomings in time to remedy them? Can the PIU suggest some additional steps to gauge and monitor progress? For example, should there be formal (quarterly?) progress reports produced by the CTA and sent to the Steering Committee? Obviously, project oversight should be a key issue in Phase 2, yet I see no evidence that anything has changed in this regard, other than the new Project Coordinator. I note also that in Section 14 (Lessons Learned), there is no discussion of the problems encountered that led to delays and incomplete project

activities in Phase 1. The PIU should acknowledge the problems it encountered and tell us how it plans to avoid them in Phase 2.

A related comment is that Appendix A was provided to list progress, but the detail provided is not sufficient to indicate actual accomplishments as opposed to plans or expectations. Furthermore, many actions are listed in that Appendix that are not specified as BSERP activities, and that may well be actions planned and implemented by other organizations such as the GEF UNDP Danube Regional Project (DRP) or working groups such as the Joint Working Group of the ICPDR and BSC. In effect, this reviewer is concerned that actual BSERP progress is being embellished by the inclusion of actions taken by other regional programs and groups. Accordingly, the Preface, as well as Appendix A and Table 26 should be modified to indicate, where possible, the specific role of BSERP in the "progress" that is listed. For example, the text states that "The Memorandum concerning cooperation between the Black Sea and Danube Commissions was signed in November 2001. A task force (DABLAS Task Force) was established as a platform for common decision making and encouraging investments for environmental protection, …….. BSERP participates in the process." What does this mean? Is BSERP a member of the Task Force? If not, is this truly a project accomplishment? Likewise, "A Joint Technical Working Group was established with the mandate to develop harmonized monitoring systems, common assessment of the ecological status of inputs of nutrients and other hazardous substances." The implication is that BSERP established this Joint Technical Working Group, but I wonder if this is the case. These and other activities listed under project progress should be clarified so the role BSERP has taken is more evident. I raise this issue because this reviewer is asked to assess the likelihood for satisfactory progress in Phase 2, yet that assessment requires some knowledge of the true effectiveness or accomplishments of the present BSERP PIU.

Another serious concern is that Phase 2 project activities are numerous and diverse (16 project components with 85 different activities). Problems with full project implementation were clearly encountered in Phase 1, and steps were taken to improve the situation. One was to hire a new Project Coordinator, and the other was to establish support offices in each of the 6 countries to support the project activities in those countries. Five-month contracts have been awarded to coordinating experts in each country, with the expectation that their effectiveness will be evaluated at the end of April and a decision made as to whether to continue this approach. I fully endorse the need for additional staff support, and hope that this strategy proves effective. If it does, the national support offices should be continued. If not, then an alternative support structure will be needed.

Again on the staffing issue – in paragraph 204, the core staff of the PIU are listed as: a Programme Coordinator (CTA); a Monitoring and Evaluation and Information Specialist/Deputy Project Manager; and a Regional Support Officer for Harmonisation with EU Water Policies. I am doubtful that this small group of individuals (one of whom is only on staff for one year) can effectively oversee all 85 proposed activities, produce the many reports that are promised, and coordinate and attend all the meetings that will be held. Phase 2 might thus have the same backlog of incomplete or delayed activities that characterized Phase 1. In this regard, Project Management Sheets (Appendix J) are potentially useful tools for guiding the progress of individual project activities. As I read through these, I wonder who will be the responsible individual(s) for each of the activities. The sheets list the main parties to be involved in the

implementation of these activities, but these are organizational entities such as the BSC, the BSC Permanent Secretariat, or simply BSERP. No specification is given on the BSERP staff who will be involved. Perhaps an additional column could be added to these sheets to indicate the individual responsible for the action (e.g., the CTA, an external consultant, an in-country coordinating expert, etc.). In this way, a manager, a reviewer, or an oversight committee could begin to see which individuals are over-committed so that steps could be taken to either drop activities, or add staff. This would also help in project management, as each staff member would could readily identify the activities require their attention.

A final comment concerns the budget. Through July 2003, project spending was considerably lower than proposed for Phase 1. Following the budget revision and appointment of a new Project Coordinator in July 2003, a new work program was established and executed. A revised budget for the remainder of 2003 and 2004 was developed and is currently being implemented. In effect, an accelerated spending plan has been put in place in which 70% of the project budget will be spent in less than 10 months. In one sense, this is welcome news, as it suggests that incomplete or delayed project activities will be undertaken. On the other hand, one wonders if this additional spending is driven by the need to spend out the budget, rather than by what can realistically be accomplished by the project staff. In other words, please assure us that the accelerated spending to close out Phase 1 will not lead to inefficiencies and reduced oversight by an over-committed PIU

Overview

The BSERP is a complex, multi-faceted program being conducted in a changing and challenging political and economic environment. The latter considerations have clearly hampered progress in Phase 1, as has some level of inadequate management or oversight by the Project Coordinator and several review or oversight committees. It is clear that significant challenges were encountered during project start-up, and it is therefore logical to wonder if Phase 2 will suffer from the same problems. This is a major concern that needs to be addressed if Phase 2 funds are to approved. My view is that it would be unwise to extrapolate future productivity on the basis of the first years of project effort. Steps have been taken to change the pace of work and the management has changed as well. I would thus recommend that the project continue into Phase 2.

Another major concern relates to the commitment from the six beneficiary countries at the national and regional levels. Economic and political forces will cause this commitment to fluctuate, and this is sure to reduce project outputs from the optimistic levels of the Brief. Nevertheless, actions such as the multi-lateral financial support of the Permanent Secretariat of the BSC and commitment of millions of dollars to wastewater treatment projects suggest that pollution control policies will continue to receive sufficient priority among these countries to warrant optimism for BSERP project success and sustainability.

Many other aspects of the project also argue strongly for a continuation. The BSERP fits perfectly with the GEF mandate for IW projects, and addresses a societal problem of great importance, not only in the Black Sea region, but worldwide as well. It is difficult to imagine a project that fits this mandate any better. To its credit, the BSERP is attempting to tackle the problem of eutrophication in a holistic or comprehensive manner, recognizing that the solution is not merely a matter of reducing the discharge of nutrients but involves protective measures to help vital ecosystems become re-established, fisheries and other living resources to be exploited

in a sustainable manner and chemical contamination to be controlled. In this context, it should be noted that economic decline has brought temporary relief to the Black Sea since the discharge of nutrients and hazardous substances has also decreased. There is therefore an opportunity to adopt a new development approach at a time when the region is starting to rebuild its infrastructure and change its policies. This window of opportunity is open now, but will most likely be a very small one.

Yet another positive factor is that the proposed project is an important component in a wider GEF Black Sea Basin Strategic Partnership that includes separate GEF interventions in the Danube and the Dnipro, several biodiversity projects, and the World Bank GEF Nutrient Investment Facility.

Overall, the BSERP should receive Phase 2 funding, but with strong recommendations for tighter project oversight, and perhaps a realistic appraisal of staffing commitments relative to proposed activities. It may come down to a choice between hiring additional support staff and national experts, versus dropping certain activities or outputs.

Appendix N Response to STAP Review

by

Pat Reynolds, CTA

March 5th, 2004

The BSERP PIU has taken into consideration all of the identified problems and recommendations of the STAP review (Appendix M). For ease of reference, the acknowledgement of the comments/recommendations and the response of the PIU is provided in a tabulated form according to the headings of the specific and general comments provided. The Project Document has been be altered to reflect all of the recommendations of the STAP review and responses of the PIU.

The PIU would like to thank the reviewer for his valuable comments. These have allowed for more extended presentation of the PIU's position on a number of issues, which are considered as important for successful project implementation by both the reviewer and PIU.

STAP Review: BSERP PIU Response

Section	Identified problem/recommendation by STAP review[39]	BSERP PIU Response
Scientific expertise		
	P – Project personnel not planned to include expertise on eutrophication or phytoplankton nutrient dynamics	The PIU agree with the reviewer's comments and will include a core staff member to manage and coordinate all activities in relation to eutrophication and phytoplankton dynamics. The essential studies proposed by the reviewer, which include determination of nutrient limitation; phytoplankton nutrient dynamics; sediment/water flux determination and quantification of the different nutrient forms entering the Black Sea are all included in the ISG work-plan during 2004-2007 (i.e. Phase 1 and 2). As a support to the new staff member, the PIU to outsource a variety of data analysis and assessment from cruise and monitoring studies to international and regional experts involved in the International Study Group activities.
	P – No subcontracts envisaged for phytoplankton nutrient dynamics	
	R – Review of data as and when available from cruises and monitoring programmes to substantiate effective control strategies for nutrients entering coastal waters	
	R– Numerical models required for phytoplankton nutrient dynamics	
	R – Assessment of historical data sets	
	R – Organic nutrient analysis should be included in research and monitoring programmes	

Section	Identified problem/recommendation by STAP review[39]	BSERP PIU Response
	P – Water quality management of the Black Sea will not be supported by the development of decision-support tools Q – Are numerical models being used in BSERP and if so, how?	It was not the original intention of the BSERP to produce an output which describes a physical/biological model of the Black Sea. Various physical/biological models do exist for the Black Sea but are limited with respect to the accuracy of calculations/observations for spatial and temporal rate processes. The focus of the BSERP, through the ISG activities, has been placed on the determination of factors controlling the movement and interaction of nutrients and hazardous substances in the coastal zone, transitional and marine waters within different environmental compartments. In addition, hydrodynamic and meteorological modelling is being conducted by the EU under their ARENA project, of which the BSERP is a stakeholder. With a numerical description of the nutrient dynamics, hydrodynamics and meteorological processes to hand, the attainment of such a physical/biological model would be within the scope of the BSERP. The BSERP is also on the advisory board of a further related EU project, the 'European Lifestyles and their effect on Large Marine Ecosystems' (ELME)[40]. The EU project, which is coordinated by the Chairperson of the ISG activities, Professor Laurence Mee (Plymouth University, UK), brings together the resources of 28 institutions from the EU and aims to provide scenario development modelling to predict the ecological impact on the four European Seas (NW Atlantic, Mediterranean, Baltic and Black Seas) with respect to future European policy development (e.g. accession process) incorporating the socio-economic changes, based on current and projected trends. The BSERP will act to support the involvement of countries outside of the EU Accession process. The Commissions responsible for the protection of the European Seas are all represented in the EU project, and thus the ELME will serve to enhance cooperation between the regional Commissions. One notable mode of cooperation through the ELME project that will aide the Black Sea is the development of a decision-support system related to eutrophication, which has been recently completed by the HELCOM for the Baltic Sea. This approach will serve as a template for development of a similar system for the Black Sea. The data generated by the ISG, pilot monitoring activities, ARENA[41] and land-based nutrient exports modelling (see below) will serve to populate the Black Sea decision-support model.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	R – The term 'rapid assessment methodology' requires clarification	The employment of a 'rapid assessment methodology' refers to the development of a nutrient export model to indicate and prioritise the major point and diffuse sources entering the Black Sea from the whole basin. This methodology will be carried out in conjunction with the GEF Danube regional project and will take into account the prior studies in the region such as the ongoing EU DANUBS model and the BSERP Kamchia river basin model, the latter being a demonstration project carried out in the first phase of the BSERP. The methodology, which relies on statistical data sets reflecting sectoral activities, has been used successfully in situations where monitoring data is limited or unreliable. The output of this activity will be linked to the decision-support system described above.
Data consistency and management		
	P - Obtaining consistency and compatibility of data	Data consistency will be ensured through the Black Sea Information System (BSIS) by use of recognised statistical techniques for data management. Data compatibility with the European Environmental Agency (EEA) and other Regional Sea Commissions is one of the key functions of the Pollution Monitoring and Assessment (PMA) Advisory Group to the Black Sea Commission. The BSERP supports the PMA Advisory group financially and technically. A joint EEA/JRC42/BSC/BSERP workshop on the assessment methodologies is planned for April 2004. This workshop will be held in Istanbul.
	P - Pilot monitoring only at the planning stage	Pilot monitoring is well underway in Phase 1. This activity is currently carried out by regionally laboratories who have been designated by the riparian countries to take part in the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP). The activity includes the regional harmonisation and QA/QC approach for biological, chemical and physical determinants prescribed in the BSIMAP. The activity includes the delivery of historical data sets to the PIU for analysis of the suitability/responsiveness and robustness of indicators of environmental status as agreed by the JTWG of the BSC and the ICPDR. Evaluation of historical data sets will be carried out in accordance with the methodologies derived by the EEA. A regional workshop to assess the results of the current Pilot Monitoring exercise will be held in July 2004. This workshop will also include the design of future pilot monitoring efforts, e.g. hazardous chemical assessment and spatial coverage.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	P – Water quality assessments conforming to EU guidelines may not be adopted in all Black Sea countries	The BSIMAP has been designed to meet the EU requirements for water quality assessments according to the EU WFD. It is correct to assume that those countries that are not in accession to the EU will not have a legal obligation to conform to the requirements of the EU and as such may not adopt the EU guidelines. However, the BSIMAP has been designed not to enforce EU legislation, but rather to promote harmonisation of water quality objectives, standards and assessment methodologies.
Adequacy of technologies		
	P – Not enough detail in strategies and technologies for nutrient reduction and ecosystem recovery strategies	As noted by the reviewer, 'none of the technologies needed to achieve pollution reduction objectives of the BSERP are technologically challenging or require technical innovation before implementation'. The BSERP has recognised that further development is required, not in the available technologies (such as wetland restoration), but rather in the institutional capacity and logical framework required to ensure that financial support is cost-effective and administered efficiently.
	P – Country commitment to project implementation	Country commitment to project implementation is always a risk. To ensure continued commitment by the riparian countries, in Phase 1 the BSERP initiated the creation of country project offices which are supported by key country staff who will act to support the project activities throughout the second phase, as well as to support the existing obligations/requirements of the countries signatory to the Bucharest Convention. The BSERP has successfully adopted in Phase 1 of BSERP a policy of working with the Black Sea Commissioners directly through the country offices. In order to maintain the country commitment, the involvement of all stakeholders is essential. This is a key concern and challenge of the BSERP. A recent regional coastal zone stakeholder assessment clearly showed that the planning process is not in the least consultative. In phase 2, the BSERP aims to bridge this gap by means of a) incorporating public relations officers within the country staff teams, b) enhanced public awareness programmes; c) training of regulatory and NGOs and d) the development of public-private partnerships (PPPs) for environmental management The readiness of each of the countries to accept loans for investment in environmental management of the Black Sea will be assured by the development of the essential institutional structures which are inter-ministerial and inter-sectoral in nature and, where relevant, incorporate PPPs.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	R – Marine Protected Areas should be encouraged as a strategy for habitat restoration and ecosystem health	Phase 2 of the BSERP will conceptualise, design and assist in implementing a pilot project for marine areas in the Bulgarian-Romanian transboundary zone (Vama-Veche). This model will serve as a template for the creation of further MPAs in the Black Sea region.
Institutional arrangements		
	P – Achieving effective networking and coordination resulting in slow progress in Phase 1	Effective networking has been achieved during Phase 1 although this undoubtedly had an impact on the progress achieved to date with respect to the activities planned. The latter half of Phase 1 has focussed on the establishment of working arrangements for Phase 2 with the ICPDR, DRP, IFIs, EU/EEA and other regional Seas Commissions, as well as the inter-ministerial, inter-sectoral and national institutional bodies acting as stakeholders in the environmental management of the Black Sea.
	P – Country commitments may fluctuate during the lifetime of the project	See above 'Adequacy of Technologies' - P – Country commitment to project implementation
	R – Proactive cooperation with the Black Sea Commission at various levels	The BSERP has established adequate cooperation with the BSC and its various Advisory Bodies as well as being responsible for the creation of ad-hoc experts groups. This will be continued through the whole of Phase 2.
	R – Recognition of EU WFD	The importance of the EU WFD (and the forthcoming EU Marine Strategy) are fully recognised by the BSC and are included in its work-plan, which is wholly supported by the BSERP. The PIU will continue working closely in Phase 2 with the EEA by means of its organisational centre responsible for inland, transitional and coastal waters (WRc, UK). The PIU also actively supports the participation of members of the BS Permanent Secretariat within the relevant working groups of the EU.
	R – Inter-ministerial coordination must have high priority in the project	Agreed. At the start of Phase 2, coordination will be assured with the ICPDR and DRP for Bulgaria, Romania and Ukraine with further elaboration by BSERP in Georgia, Russia and Turkey during the second Phase. This activity will start in early Phase 2 and will continue through the life-time of the project. Inter-ministerial representation will be sought during the Black Sea Donor Conference to be held back-to-back with the Black Sea Scientific Conference and Black Sea Commission Meeting in October 2006.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
Global environmental benefits and GEF relevance		
		No comments required. The PIU agree with the reviewer.
Regional context		
		No comments required. The PIU agree with the reviewer.
Replicability of the project		
		No comments required. The PIU agree with the reviewer.
Sustainability of the project		
		No comments required. The PIU agree with the reviewer.
Linkages to other focal areas		
		No comments required. The PIU agree with the reviewer.
Stakeholder involvement		
		No comments required. The PIU agree with the reviewer.
Capacity building		
	Q – Black Sea 'Train Sea Coast' course development for agricultural management of nutrients delayed, explain why?	In the Phase 1 project Document, it was envisaged that Train Sea Coast (TSC) course development for agricultural management would be completed and delivery of the course would have been initiated within the Black Sea region. Unfortunately, due to circumstances outside of the control of the BSERP, the required progress in this area was not achieved, i.e. the course material has only recently been completed. The problem stems from the fact that the TSC is not directly responsible to the BSERP. In other words, the BSERP is an end-user of the TSC and in this capacity cannot influence the speed, at which the course development takes place. Since the course material for agricultural management training is now complete, the BSERP does not envisage any further delays with the implementation of the TSC programme in the Black Sea region.
Innovativeness of the project		
		No comments required. The PIU agree with the reviewer.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
General comments		
	P - Project oversights	
	a) acknowledge past problems and specify steps to be taken in Phase 2	The PIU team recognises the management problems encountered in Phase 1 of the project. It would not be correct to assume that the previous management of the project was alone responsible for the lack of progress achieved in Phase 1. The riparian countries and the Permanent Secretariat of the BSC must also share responsibility for the slow progress in the project implementation. However, the PIU agree with the reviewer's comments to acknowledge past problems and specify appropriate steps that will ensure that progress in Phase 2 does not meet with the same blockages. The following project oversights occurred in Phase 1. • 4 out of 7 of the PIU core team were changed in the first 1.5 years of Phase 1 leading to a lack of consistency in project implementation: *Staffing structure and activities refocused during the latter half of Phase 1. With respect to the support staff, changes were made by the creation of a position for a contract manager and the replacement of the financial administrator (see below). The professional staff included a new CTA, a Monitoring and Evaluation and Information specialist and a Public Participation Specialist. The latter role proved difficult since there is a conflict in choosing an individual for this post, i.e. the position requires extensive public participation experience with acceptance of the individual in the Black Sea region deemed critical for the success of the activity. In Phase 1 BSERP has selected 2 individuals, the first of which failed to implement the activities required, and the replacement was not accepted by a number of NGOs in the region due to lack of relevant*
	b) increased monitoring by SC	
	c) additional steps required to gauge and monitor progress by PIU	
	d) no evidence of management change from Phase 1	
	e) no acknowledgement of previous problems encountered in Phase 1 or how they will be avoided in Phase 2	
	f) progress insufficient to indicate actual accomplishments	

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	g) actual progress of project is embellished by actions taken by other regional programmes or groups	

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	P – programme activities numerous and diverse	The original project activities planned for both Phase 1 and 2 were numerous and diverse. The PIU clearly recognised this situation and subsequently re-focussed the activities originally planned for Phase 2. This is in-part evidenced by the reduction of main objectives in Phase 1 and 2 from eight to five, respectively. Since the BSERP is tackling the Black Sea Ecosystem recovery from a holistic viewpoint, it would be difficult to undertake such a programme which excluded the activities planned for Phase 2. It is evident that there is a need for further support to (i) the Black Sea Permanent Secretariat (which has only been in operation since 2000 and is still understaffed), (ii) the development of policy guidelines, (iii) the development of economic instruments and investment opportunities, (iv) the development for operational systems and information management and (v) further strengthening in public participation in the region.
	R – need for further staff support	Agreed. Answered in the section relating to 'Scientific Expertise'.

Section	Identified problem/recommendation by STAP review	BSERP PIU Response
	R – Support to national project offices should be continued	Although this is a financial burden to the project, the positive value of such an institutional set-up in each country out ways the negative aspects considerably. It would be inconceivable for the BSERP to manage the activities without such a structure in place. The direct linkage of the country team leaders to their respective Black Sea Commissioner ensures that the implementation of project activities is under the auspice of the government, i.e. data collection, environmental management planning. National experts are employed by the BSERP only after agreement with the country Commissioner. The intention of setting-up national project offices is also linked to sustainability. It is expected that such offices will in the future remain as ministerial nodes for the management of the Black Sea.
	P – With staffing specified in Phase 2, the PIU would not be able to oversee all project activities as well as produce reports and participate in meetings	The inclusion of an eutrophication expert to the core project staff will alleviate this problem. Project management data sheets have been altered to reflect the responsibilities of the PIU team. Another means of ensuring a coherent oversight of the project from the countries perspective is the newly established project country offices.
	Q – Was the budget spending in Phase 1 driven by the need to spend out the monies?	There is no doubt that the spending of the project monies could be interpreted as a 'spend-out'. However, it must be borne in mind that when the change of management of the PIU took place in July 2003, it was evident to the Steering Committee that few activities had actually been initiated since the start of the project in April 2002 (reference to Objectives 2 and 4 in particular). As a response, the new management team initiated activities in all of the 8 objectives of the BSERP. Since the management change over, the project has delivered in excess of 150 contracts to international and regional companies and individual experts to initiate the activities in preparation of Phase 2. In order to aide with the capacity-building and development of an institutional structure, the majority of contracts were provided to regional experts in Phase 1. In each area of activity, the PIU chose an international 'mentor' to aid in the coordination and direction of the activity. This approach will be continued throughout Phase 2.

Overview	P – Inadequate management during Phase 1 with respect to coordination and performance monitoring	This is very much appreciated by the PIU. Interventions to improve the situation are: • The CTA and Deputy Manager of the Project have additional related tasks for the monitoring and evaluation of the progress in the project implementation; • A set of process indicators for the monitoring and implementation of the project are being developed and currently under discussion between the DRP, BSERP, ICPDR, BSC. This activity will be completed before the start of Phase 2 • The involvement of each riparian country in monitoring and evaluation of the project implementation has increased through regular (monthly) reporting by each Country Team Leader. This was introduced in Nov 2003. • Quarterly reporting by the PIU on the project's progress will be initiated in Phase 2. The recipients of the progress report will be members of the Project Steering Committee. • The project management team have planned additional visits to each riparian country in order to discuss project implementation issues with the Black Sea Commissioners, National Coordinators, and country project office staff.
	R – Possible choice between hiring additional support staff/experts versus dropping certain activities or outputs	Recommended option is not to drop any activities, since they have been agreed and supported by the countries, as well as by international commissions (BSC, ICPDR). The preferred choice of the PIU would be to increase the budget of the project sufficiently to allow support for an additional professional international staff member with experience in eutrophication and nutrient dynamics. This idea has been preliminary agreed with the UNDP's Principal Technical Advisor for International Waters.

Istanbul, Turkey
March 5th, 2004

Appendix O Countries Endorsement Letters (pdf file)

Appendix P GEF Secretariat Concept Agreement Review (pdf file)

Appendix Q PIU Response to GEF Secretariat Concept Agreement Review

No	Identified problem/recommendation by the review	BSERP PIU Response
1. COUNTRY OWNERSHIP		
Country Eligibility:		
1	Have Russia and Georgia paid their contributions to the BSC? It will be expected at CEO endorsement that they have. If not, they will not be eligible.	Payments have been made as follows (year start 1st September): 2000/2001 – all except Georgia 2001/2002 – all except Georgia and Ukraine 2002/2003 – all except Georgia and Ukraine 2003/2004 – Romania and Russia paid. Bulgaria and Turkey expected to pay.
Country Drivenness:		
	None	
Endorsement :		
2	Endorsement letters from all six governments are now included (March 17)	
2. PROGRAM AND POLICY CONFORMITY		
Program Designation and Conformity		
	None	
Project Design		
3	The root causes of the concerns identified in Tranche 1 should be briefly presented in the Executive Summary as a background to the proposed activities.	Text and a table presenting the main root causes and priority areas have been added to the ExecSumm (Section 1a).
4	Adaptive management should be used, e.g., TDAs should be conducted cyclically (every 5 years). The fifth year State of the Environment report should include the TDA as an annex. The TDA should include a map showing pollution hot spots and sensitive habitats.	A TDA will be conducted and reported before the end of Tranche 2. This activity has been added in Output 1.1. The forthcoming SOER will be reported in 2007, which will coincide with the completion of the project.

No	Identified problem/recommendation by the review	BSERP PIU Response
5	The State of the Environment reports should preferably be produced every 5 years only, and not annually (fewer quality publications capturing real observed changes are better than annual reports where the issues are not seen in perspective).	Agreed.
6	The SAP(s) should be revised at the end of the project.	The SAP will be revised and reported before the end of Tranche 2. This activity has also been added in Output 1.1.
7	The proposal refers to Strategic Action Plans - should be Strategic Action Programs?	Agreed. The corresponding changes are made in par. 30, 42, 251, and 261 of the Project Document.
8	The LBA legal component is unclear. It would be expected that the countries sign the document before the end of the project.	UNEP is currently heavily involved in the development of a new LBA Protocol. A number of local consultants/focal points have been employed to support the activity and to facilitate the adoption of the document being developed and adjusted to the real situation of the Black Sea countries. It is expected that the technical activity will be completed by 2004 end. The official adoption of the new Protocol by the Black Sea countries is expected to be concluded before the end of Tranche 2. Change is introduced in par. 88 of the Project Document and Section 1a of the ExecSumm.
9	We understand that a Fisheries Convention will be negotiated. The brief is unclear about what will be accomplished.	Currently, the draft of the Fisheries Convention exists but it is not finalised due to problems in the countries, i.e. the institutional set-up. The BSC have spent some time to determine how the problem should be solved and by whom. Most of the countries agree that there should be a Convention. However, Ukraine stated that it is impossible for them to sign such a Convention since they have, by Decree, a cap on signing International Conventions. The text of the Convention has been negotiated in the Fisheries and Other Marine Living Resources (FOMLR) Advisory Group to the BSC. Unfortunately, since scientists have been involved to date and not resource managers, the draft is not yet in an adequate state to be officially presented to Governments.

No	Identified problem/recommendation by the review	BSERP PIU Response
		The BSERP will act as a mediator in Tranche 2 to support the consultation and negotiations of the Fisheries Convention. In doing so, the project will facilitate and coordinate the relationship between the future document and the new Biodiversity Protocol to the Bucharest Convention (two annexes will be common to both documents). The project will aide the finalisation of the text. A core element of the fisheries Convention will be the introduction of a quota system. There is a problem related to the establishment of a quota system, i.e. stock assessment. It will certainly not be possible to organise a stock assessment within the scope of the project since the species are migratory – such an exercise will require substantial resources. However, it will be possible for the project to negotiate the methodology, without which it would not be possible to reach any agreement on the Convention. Since it is not necessary to complete an assessment to finalise the Convention, there is no reason why the project could not be able to produce a document for official presentation to the Black Sea countries within Tranche 2.
10	The SGP work should be clarified. Like the Danube SGP they should targeted to hot spots of nutrient toxic substances pollution.	The previous Black Sea TDA (produced in 1995) as well as the National Black Sea Environmental Studies (Turkey, 1998, Ukraine, 1998) specifically studied and ranked pressures on the Black Sea environment from land-based sources and prioritised "hot spots", which required attention and urgent actions. These totalled to 49. In all coastal states, industries are generally connected to municipal wastewater treatment systems, and, therefore, mixed waste waters are discharged from municipal sources. For this reason, the priority point sources of pollution, sometimes referred as "hot spots" and described in Black Sea TDA, are presumably presented by municipal wastewater treatment plants or port treatment facilities. All Black Sea coastal states, in particular, those countries with

No	Identified problem/recommendation by the review	BSERP PIU Response
		transitional economies, do not have sufficient economic power to resolve the existing problems in the municipal sector to which most of the priority sources of pollution belong. In a majority of the Black Sea coastal states the construction of wastewater treatment facilities is not sufficient for eliminating pollution from priority sources of pollution. Their sewer systems, built in 1960 -1970s, also need upgrading. For example, in Ukraine over 25 % of sewer and water supply pipelines are completely worn out which results in two accidents per year for every 1 km of sewer pipelines. As a result, frequent accidental discharges of untreated wastewaters occur and/or technological requirements for discharged waters are not fully met. The process of upgrading and installation of new waste-water treatment municipal facilities requires sufficient investments (beyond the capacity of the current project) from the international financial institutions and local governments. In this context, the only one opportunity to use very limited SGP funds for the issue of "hot spots" is implementation public awareness projects. During tranche 1 of the BSERP, one project dealt with the issue of "hot spots". The project was funded and successfully implemented by a Turkish NGO. The lessons learnt and best practices of this SGP project will be disseminated among related stakeholders. It has a good potential for further replication under the BSERP SGP/Tranche 2. Also, each SGP project within Tranche 1 contained a public awareness component on the Black Sea environmental problems (including "hot spots"). Nevertheless, the issue of "hot spots" in the Black Sea riparian countries could be addressed through the SGP projects in the field of restoration and protection of wetlands and constructed wetlands that play significant role in the process of limitation of load of nutrients and other hazardous substances discharged by municipalities. Within the Tranche 1 several

No	Identified problem/recommendation by the review	BSERP PIU Response
		SGP projects were successfully implemented in the area of constructed wetlands and protection and restoration of the wetlands. They demonstrated good potential for further replication and dissemination in the Black Sea riparian countries and could be recommended for further funding under the BSERP SGP. Furthermore, agriculture could be considered as a significant source of nutrients and other hazardous substances (diffusion pollution). It is deemed important to promote environment friendly agriculture technologies and practices (BAPs) in the Black Sea countries in order to reduce the load of nutrients and other hazardous substances. Likewise, it will be important to continue providing funds to the SGP projects related to the promotion of organic farming and other environment friendly agriculture techniques. The positive experience in this area has been demonstrated by several SGP projects within Tranche 1
11	It should be clarified how the socio-economic analysis will be used to achieve pollution reduction in the Black Sea.	A study of the past, present and future activities of all the different sectors in the riparian countries would provide essential information on the pressures that impact on the Black Sea ecosystem. Economic and social parameters are known to be "root causes" of such pressures and so developing a good understanding of this so-called "external environment" forms the basis of any preventative, mitigatory and remedial strategy needed to guide land-based activities needed in turn to improve or at least stabilize and prevent further degradation of the BS ecosystem and of fresh water resources. Information required will be in the fields of: (i) economic ($ value of production, GDP contribution etc.) and social (Employment etc), (ii) natural resources (volume of production/extraction, resulting area of land use changes/ conversion etc.), (iii) environmental engineering (e.g. existing production and treatment technology and effluent quality) and (iv) environmental ecology (in stream and marine water quality as defined by various environmental status indicators).
Sustainability (including financial sustainability)		

No	Identified problem/recommendation by the review	BSERP PIU Response
12	It should be described how the main objective of the project, reduced N and P loads to the Black Sea, can be ensured after the project has ended.	The development of strategic action programmes will be a driving force for assuring and maintaining nutrient reduction in the Black Sea region. In order to financially support this, a series of activities are being developed and planned, .e.g. a donor conference highlighting a series of bankable projects, the DABLAS activities, the use of local financial intermediaries to channel funds to small and medium sized projects to the coastal zones and the development of public-private partnerships (the latter potentially as a new GEF regional initiative).
13	The project should include a revision of the SAP at the end of the project. The revised SAP should be a driving force for activities following the project.	The SAP will be revised and reported before the end of Tranche 2. This activity has also been added in Output 1.1.
14	Details of the Donors' Conference are unclear. WB/EBRD/EIB should be involved and hold the conference.	The project has initiated preparation of a joint event in October 2005 (encompassing the 'Black Sea day') expected to comprise of a two-day scientific/NGO meeting held back to back with a two day Donors' conference. This will be immediately followed by a one day BSC meeting. The intention of the combined meeting is to ensure linkage between the science, investment development and stakeholder involvement. The project will act to focus the scientific/NGO output for presentation to the donors/IFIs, i.e. presentation of bankable projects, problems identified and solutions proposed. The Donor conference will also be expected include the regional inter-ministerial representation, i.e. Ministries of Agriculture, Fisheries, Economy etc. The output of the Donors' conference will be expected to ensure national buy-in/commitment to the overall development process in the region. The Donors' Conference will be prepared and held jointly with the IFIs.(i.e. EBRD/WB/EIB). Corresponding changes to the text have been introduced in Output 3.2 of the LogFrame matrix (ExecSumm and ProDoc)
15	Other issues that could be discussed under sustainability are: capacity building; demonstrating economic benefits from the project	The project management team understands the importance of the mentioned activities. A series of training events are planned for Tranche 2. Most outputs of the project include a corresponding training activity,

No	Identified problem/recommendation by the review	BSERP PIU Response
	activities/objectives; ownership by project beneficiaries.	e.g. hands-on training, workshops, awareness campaigns, information seminars. Within Tranche 1 a series of educational materials have been developed (educational study pack, booklet on responsible fisheries, book on exotic species/intruders to the Black Sea and the development of a novel 'Educational Dome' (the latter can be viewed on www.snackshow.com/bsp). The economic benefits from project activities will be achieved in time by implementation of environmentally friendly strategies and capital investment and other bankable projects in the region. Ownership by project beneficiaries has been instigated in Tranche 1 by the design of implementation of the project institutional structure in the Black Sea region (project offices in riparian countries, ad-hoc expert groups, increased frequency of SC meetings, increased involvement of the BS Commissioners in the project activities, supporting of the BSC activities in the countries etc.).
16	The proposal should acknowledge that the sustainability of the project depends on the reforms actually undertaken by the participating countries.	This has been reflected in all assumptions within objectives 1, 2 and 3 of the log-frame matrix. The national reforms are readdressed within the Executive Summary of the Project Document
Replicability:		
17	The following two features are necessary for replicability: 1. Achievements of national and regional reforms that decrease nutrient pollution. 2. The Donors' conference, which can spur investments.	1. Agree. Objectives 2 and 3 of the Project would adequately contribute to the overall reform and policy guidelines backed by legal/institutional instruments for reduction of pollution from land-based sources. These will include corresponding activities related to the development and adoption of a new LBA protocol, coastal zone management procedures, implementation of BAPs, BATs, finalising of the text of the Fisheries Convention including an annex for the Marine protecting areas with an observation plan, identification of hot-spots and introduction of control measures for pollution reduction, prioritisation of municipal WWTP (re)construction with reference to the DABLAS Task force, setting up of

No	Identified problem/recommendation by the review	BSERP PIU Response
		financial intermediaries for the administration and management of small to medium sized investment projects, etc. These activities are outlined in Objectives 2 and 3. 2. Donor conference – see 14 above
Stakeholder Involvement:		
18	Have stakeholders been involved in the project development?	Yes. One of the activities of Tranche 1 was to perform stakeholder mapping and assessment (completed in Bulgaria, Georgia, Russia and Turkey; under completion in Ukraine and planned to be undertaken in Romania in late April 2004). In the development of the project document for Tranche 2, consultations have been held with the BSC and its Permanent secretariat, ICPDR, DRP, and regional NGOs, The latter have been involved in the project development indirectly by incorporation of the main results of Tranche 1 activities (i.e. SGP, training events, Educational Study Pack, Responsible fisheries booklet). The outputs from all consultations have been generally incorporated into the project document. The corresponding changes are introduced in Section 1d - Stakeholder Involvement.
19	Regarding NGOs: what happened to the Black Sea environment forUm43?	The Black Sea NGO Forum, the first regional level attempt of NGOs for cooperative activities aimed at the protection sand rehabilitation of the Black Sea. The Forum was inspired and supported by the Black Sea Environmental Programme (BSEP), established in 1993 by the governments of the six BS countries for implementation of the Bucharest Convention for the protection and rehabilitation of the BS. It is financed mainly by GEF, the inter-governmental financial mechanism addressing critical threats to the global environment. Till 1997 the Forum conducted its activity mainly at the annual meetings of 12 representatives from the 6 BS countries, who discussed the environmental problems of the Black Sea and progress of BSEP. Started as a rather informal structure, the Forum remained a discussion group without decision-making capabilities. Therefore, planning and consistent NGO activity was not to be expected. With the exception of NGO activities marking the

No	Identified problem/recommendation by the review	BSERP PIU Response
		International Black Sea Day (31 October) financed directly by BSEP, the Forum had very limited capacity for effective influence on the regional decision making process or for concrete steps in solving regional environmental problems. The Forum stopped its activities in 1998. At the present moment several regional NGOs "umbrella organizations" operate in the Black Sea riparian countries. The Black Sea NGO Network (BSNN) came into existence as a result of the development of the NGO community in all the countries surrounding the Black Sea Currently the BSNN has observer status to the BSC meetings. Further observer status will be provided to any NGO (network) which is able to fulfil the criteria developed by the BSC.
20	Clarify the SGP-plan.	According to the UNDP GEF/SGP Operational Guidelines in line with recommendations of the 2nd Project Steering Committee Meeting (September 2003), the PIU has introduced the following approach to the implementation of the Small Grants Programme within BSERP/Tranche 2: 1. After the final approval of eligibility and selection criteria proposed to the countries within BSERP/Tranche 1, the PIU will announce the Second Call for SGP proposals. The PIU will disseminate information on the eligibility and selection criteria, as well as guidelines on preparation and submission of project concepts. 2. After identification of problem/threat in GEF Focal Area and Operational Program, NGOs will prepare project concepts in close consultations with PIU and members of SGP Selection Committee. The SGP Selection Committee (SGP-SC) will be established in early Phase 2 in-line with the GEF policy. 3. All submitted project concepts will be evaluated by members of the SGP-SC. Feedback on project concepts will be also provided. After that, NGOs will be able to transform their

No	Identified problem/recommendation by the review	BSERP PIU Response
		project concepts into project proposal documents and submit these proposals for review and selection to the members of SGP-SC. 4. Submitted project proposal could be approved, rejected or recommended for improvement by the members of SGP-SC. Approved proposals will be contracted out. 5. To monitor the implementation process, each of the SGP project recipients will be asked to submit an Interim Reports. 6. At the end of the SGP project the grant recipient has to submit Final Report. The results of the SGP projects, lessons learned and best practices will be disseminated by PIU among project stakeholders. Disbursements will follow the approval of financial reports.
Monitoring and Evaluation:		
21	Process indicators, stress reduction indicators and environmental status indicators should be presented. The proposal mainly present process indicators, while environmental status indicators are lacking (e.g. improved or sustained nutrient levels).	The process indicators have been considered important at the stage of the project design and development; therefore, mainly the process indicators were included in the Project Document. On the other hand, the state and stress reduction indicators are addressed to a needed extent in the project activities. The whole set of indicators being developed in both GEF (process, state, state reduction) and DPSIR structure are presented in a separate report. It should be mentioned, however, that the presented set of indicators has not been finalised and properly discussed with the parties involved, and cannot be considered as final. The recent developments in EEA and EC have to be also taken into account. A summary of a report, which reflects the development of P, SR, and ES indicators are included as a separate annex to both ExecSumm (Annex G) and ProDoc (Appendix P)
22	Generally, the outcomes and indicators should be more specific. GEF support for the first 12 years should be reflected in the specificity of the proposed	The LogFrame has been revisited and the following Outcomes have been revised: • Output 1.1: outcomes 3 and 4 have been added, outcome 6 –

No	Identified problem/recommendation by the review	BSERP PIU Response
	outcomes and indicators, e.g., specific reforms in specific nations, sectors and specific planned investments.	wording changed; • Output 2.1: outcome 1 – the deadline has been changed from 'by 2005' to 'in 2005'; • Output 2.2.: outcome 1 – wording changed; • Output 2.3.: outcome 1 – wording changed, outcome 3 has been added; • Output 2.4.: outcomes 1 and 2 – wording changed, outcome 3 has been added; • Output 2.5.: outcomes 1 and 2 – wording changed; • Output 2.6.: outcomes 1 and 2 – wording changed; • Output 3.1: outcome 1 – reformulated; • Output 3.2.: outcome 2 – wording changed; • Output 4.1.: outcome 2 – has been added; • Output 5.1.: outcome 4 – wording changed; • Output 5.2: outcomes 1 and 2 – wording changed.
23	How should the reduction of N loads with 11% and P with 8% (p. 8 Exec. Summ.) be measured?	The figures of 11% of N and 8% of P reduction are estimates for the nutrient reduction from the Danube over to the Black Sea. The figures have been included simply to indicate the effectiveness of similar to the BSERP's activities in the Danube countries. As far as the Black Sea is concerned, real estimates of the total nutrient reduction have been introduced in Tranche 1 and will be developed further in Tranche 2. The approach to estimating the real nutrient reduction in the Black Sea depends on the data availability and reliability and will result from a series of inter-related activities of BSERP (some of the activities have been started in Tranche 1 of the project). These activities include: • Monitoring of riverine nutrient loads (the Danube and Kerch Straight) within research activities of the project (Tranche 1) • Atmospheric deposition of nutrients to the Black Sea (planned for Tranche 2) • Data collection (current and historical) for sectoral land base sources and the state of environment and coastal zone (Tranche 1

No	Identified problem/recommendation by the review	BSERP PIU Response
		and 2) • Pilot Marine Monitoring of a set of 15 indicators of eutrophication (11 of those have been agreed within the Joint Technical Working Group activities with the ICPDR/DRP) (Tranche 1) • Spatial coverage Pilot Monitoring (planned for Tranche 2) • Data assessment methodologies (Tranche 1 and 2) • QA/QC procedures harmonisation under an IAA with the IAEA in Monaco • Links to the other organisations/marine conventions (EU Joint Research Centre, EEA Coastal and Inland Waters Centre) • Establishment of the Coastal Information-Analytical Centres (Output 2.2) and strengthening of the focal points of the Black Sea Commission
24	Output 2.4 (p 24 Exec. Summ.): "Policies and legislation xxx reviewed and proposed xxx" is not adequate. It should be "enacted" or "implemented" instead of "reviewed and proposed"	Agreed, the Project Document has been changed accordingly.
25	Output 1.1 (p 18 Exec Summ): "xxx developed and functioning". Documentation of functioning will be needed.	Agreed. This is a very important point. The intention of the project is to develop a set of M&E indicators for the implementation of the Bucharest Convention. Further verifiable indicators have been included in the Project Document to reflect this.
26	Revised TDA and SAP should be included as process indicators.	Agreed. Further activities to review the TDA and SAP have been introduced in the Project Document (Output 1.1). Correspondingly, the revised TDA and SAP have also been included as process indicators.
3. FINANCING		
Financing Plan		
27	Appendix G "Letters from the ministries on countries' inputs". Missing?	Electronic version of the letters exists only in a PDF form. This is why, only a PDF version of the ProDoc contains the full set of documents. Please, address the PDF-format Project Document.

No	Identified problem/recommendation by the review	BSERP PIU Response
Implementing Agency Fees		
	None	
4. INSTITUTIONAL COORDINATION AND SUPPORT		
Core Commitments and Linkages		
	None	
Consultation, Coordination, Collaboration between IAs, and IAs and EAs, if appropriate		
28	Links with the Danube Basin project and the WB Investment Fund should be clarified.	• Links to the Danube basin programme has been ensured by the involvement in the design and development of the Project Document for Tranche 2 the former ICPDR Executive Director, Mr. Joachim Bendow. This was intended to ensure the coherence of the programmes and compatibility of the results. • BSERP CTA also participated in the WB meeting of the APCP in Buchrest. • Another intention is using the same consultants (and, consequently, the methodologies) in implementation of both projects. • Coordination Meetings of donors/IFIs, Commissions, regional GEF projects have been planned (2 per year). • Both projects are actively supporting activities within the Danube-Black Sea JTWG.
5. RESPONSE TO REVIEWS		
Council		
	None	
Convention Secretariat		
	None	
GEF Secretariat		
	None	
Other IAs and RDBs		
	None	
STAP		

No	Identified problem/recommendation by the review	BSERP PIU Response
	None	
Review by expert from STAP Roster		
29	STAP roster response is now included and some changes in the project done accordingly.	No comments.
30	The progress/problems in Tranche I should be summarized in the Executive Summary (since most council members only read that). (Expected at Work Program inclusion). The project should be revised to reduce the number of activities. (Expected at CEO endorsement).	Agreed. The ExecSumm has been changed accordingly. A separate chapter has been included in the ExecSumm.

Istanbul, Turkey
April 2nd, 2004

Appendix R World Bank Review

From: Mzeki@worldbank.org [mailto:Mzeki@worldbank.org] On Behalf Of Ebattaglini@worldbank.org
Sent: 30 March 2004 13:52
To: frank.pinto@undp.org; yannick.glemarec@undp.org; undpgef@undp.org
Cc: ahmed.djoghlaf@unep.org; kritins.mclaughlin@rona.unep.org; gefprojects@unep.org; kennedyw@ebrd.com; gcoordination@thegef.org; Aduda@thegef.org; Amerla@thegef.org; wbgefoperations@worldbank.org; Mhatziolos@worldbank.org; Pdewees@worldbank.org; Pkrzyzanowski@worldbank.org; Adamianova@worldbank.org; tarin@worldbank.org; Smaber@worldbank.org; Mbromhead@worldbank.org; Jgoldberg@worldbank.org; Jsrivastava@worldbank.org; MSehgal@worldbank.org; Anacev@worldbank.org; Drachita@worldbank.org; Smanghee@worldbank.org; Vloksha@worldbank.org; Ebattaglini@worldbank.org; Mzeki@worldbank.org; Rkhanna2@worldbank.org; Swedderburn@worldbank.org; Daryal@worldbank.org
Subject: IW/OP-8 REGIONAL:Europe: Control of Eutrophication, hazardous substances and related measures for rehabilitating the Black Sea
ecosystem: Tranche 2

Dear Frank:

Further to my email of March 22, 2004 I am providing below more comments on UNDP's above proposal from our regional colleagues, who have been traveling on mission and only recently had the opportunity to review the proposal. We apologise for the delay and hope the following will still be of use.

This is an extremely ambitious project--as discussed by the STAP reviewer, it includes some 16 project components and 85 activities. It is doubtful, given the challenge of getting a coordinated and sustained commitment of all 6 Black Sea riparians to this effort, that the proposed staffing and financial resources are adeqaute to carry this off. From experience elsewhere with regional projects, successful implementation requires a skilled and fully staffed project coordination unit, focused on delivering a limited number of key outcomes. We fully concur with the STAP reviewer's recommendation to reduce the number of activities and increase the number of PCU staff (either full time or available on retainer) to oversee project implementation.

In many instances, the time required to achieve project outputs (and outcomes) is seriously underestimated. Examples include the fishery legislation described in Output 2.6 (A legally binding document on fisheries and proposals for fisheries-free zones developed by end of 2004 and as stated in the outcome section to be enforced by 2005). There are few things more controversial than fishery agreements and jointly deciding on no take zones in the region, however necessary, will require a strong environmental education campaign involving fishermen and policymakers, as well as alternative economic activities to engage fishermen who would otherwise fish in these areas. Strong surveillance, monitoring and enforcement capacity will also be required to implement the proposed fishery free zones.

Another example of a process that will likely require significantly more time and resources to develop is the regional environmental montioring program for the Black Sea (see Output 4.1). A standardized monitoring program that includes relevant indicators and is consistent with the EU WFD is extremly important and would constitute a major outcome of the project. Based on experience, developing such a systematic protocol and identifiying and training those responsible for carrying out the monitoring,will require at least two years to develop. Identifying the resources and incentives to sustain such an effort is another challenge that will need to be addressed, to ensure that the monitoring continues well after the project ends.

Under Output 3.2--Preparing investment programs for industrial and municipal wastewater treatment, it is strongly recommended that the Project Team coordinate with the Bank in developing these investments, for access to the Bank-administered Nutrient Reduction Facility. It will be important to get donor buy-in to proposed investments well upstream of any donor's conference. It may be somewhat ambitious to prepare 20 priority projects for donor support by 2005. A smaller number of well prepared investments would have a greater chance of getting funded and launched within the project's life (or shortly after this phase ends).

Furthermore, the project would benefit from stronger collaboration with existing intitiatives in the region and more explicit opportunities for information-sharing (workshops, joint research, etc). Also, the monitoring activities could be further strengthened and unified to rapidly identify nutrient/pollutants entering the system (and the polluters!) and use this information to identify hotspots, but also to influence policy-makers to take action and eventually to develop an active and dynamic water quality model.

The true success in meeting the objectives of the project may actually be beyond its reach - influencing the practices of farmers all around the Black Sea who contribute to the high nutrient levels. This will require a change in incentives and national policies over the long-term, but the project could at least initiate these processes and demonstrate successful models which support these goals. We actually have some pretty good models for nutrient reduction by farmers in the Poland Rural Environmental Project (where farmers engaged in manure management and better land use), in Romania and in Georgia. All these are GEF/Bank projects designed to implement the TDA/SAP, and need to be scaled up.

Best regards.

Emilia Battaglini
GEF Regional Coordinator, Europe and Central Asia
The World Bank
tel (202) 473-3232; fax (202) 614-0696/7/8; ebattaglini@worldbank.org

Appendix S PIU Response to WB Review

Identified problem/recommendation by WB review	BSERP PIU Response
This is an extremely ambitious project - as discussed by the STAP reviewer, it includes some 16 project components and 85 activities. It is doubtful, given the challenge of getting a coordinated and sustained commitment of all 6 Black Sea riparians to this effort, that the proposed staffing and financial resources are adequate to carry this off. From experience elsewhere with regional projects, successful implementation requires a skilled and fully staffed project coordination unit, focused on delivering a limited number of key outcomes. We fully concur with the STAP reviewer's recommendation to reduce the number of activities and increase the number of PCU staff (either full time or available on retainer) to oversee project implementation.	The initial design of the project, which started in early 2002, contained 8 overall objectives. Tranche 2 Project Document has been reduced to 5 objectives, as agreed with the interested parties (BSC, ICPDR, DRP and NGOs), without changing the overall project emphasis. The project management agrees that reaching the ambitious project objectives is possible only if the PIU is adequately staffed and equipped. Following the STAP reviewer's recommendations, the project professional team has included a full-time position for a eutrophication/marine monitoring specialist. In addition, the PIU are supported in each of the objectives planned for Tranche 2 by recognized international consultants with extensive regional experience. The role of the consultants is two-fold, i.e. to provide methodological and technical guidance to the PIU as well as providing their essential experience in relation to regional capacity-building
In many instances, the time required to achieve project outputs (and outcomes) is seriously underestimated. Examples include the fishery legislation described in Output 2.6 (A legally binding document on fisheries and proposals for fisheries-free zones developed by end of 2004 and as stated in the outcome section to be enforced by 2005). There are few things more controversial than fishery agreements and jointly deciding on no take zones in the region, however necessary, will require a strong environmental education campaign involving fishermen and policymakers, as well as alternative economic activities to engage fishermen who would otherwise fish in these areas. Strong surveillance, monitoring and enforcement capacity	A number of outputs planned for Tranche 2 depend entirely on Tranche 1 activities and results. A legally binding document for fisheries is one of these examples. The project has previously supported a regional meeting of Black Sea national legal representatives (Cile, Turkey, May 2003) from the Ministries of Foreign Affairs and Black Sea Commission representatives to discuss the details on how to approach the development of a legally binding instrument on fisheries. The activities in the Project Document for Tranche 2 are indeed a continuation of activities previously started in Tranche 1. However, the Project Management shares the concerns expressed by the reviewer. Corresponding changes have been incorporated in the Project Document with extension of the timeframe for output 2.6 for a period of one year.

Identified problem/recommendation by WB review	BSERP PIU Response
will also be required to implement the proposed fishery free zones.	

Identified problem/recommendation by WB review	BSERP PIU Response
Another example of a process that will likely require significantly more time and resources to develop is the regional environmental monitoring program for the Black Sea (see Output 4.1). A standardized monitoring program that includes relevant indicators and is consistent with the EU WFD is extremely important and would constitute a major outcome of the project. Based on experience, developing such a systematic protocol and identifying and training those responsible for carrying out the monitoring, will require at least two years to develop. Identifying the resources and incentives to sustain such an effort is another challenge that will need to be addressed, to ensure that the monitoring continues well after the project ends.	The development of the regional environmental monitoring program for the Black Sea has been underway for a substantial period of time. Indeed, in 2000, the Black Sea Commission employed a pollution monitoring and assessment officer responsible for the development of an integrated regional environmental monitoring programme as well as harmonisation of the methodologies and certification procedures. In Tranche 1, the PIU supported a number of activities towards the further development of the regional monitoring programme, namely pilot monitoring of eutrophication indicators, the introduction of acceptable and effective QA/QC procedures (IA agreement with IAEA, Monaco).
Under Output 3.2--Preparing investment programs for industrial and municipal wastewater treatment, it is strongly recommended that the Project Team coordinate with the Bank in developing these investments, for access to the Bank-administered Nutrient Reduction Facility. It will be important to get donor buy-in to proposed investments well upstream of any donor's conference. It may be somewhat ambitious to prepare 20 priority projects for donor support by 2005. A smaller number of well prepared investments would have a greater chance of getting funded and launched within the project's life (or shortly after this phase ends).	The project management strongly agree with the recommendation for coordination with Bank for the development of investments related to nutrient reduction and regards this as a priority. To date, the coordination between the PIU and the Bank has been ineffective both in terms of strategy and more importantly logistics. This must be a 'two-way street'. Donor/IFI coordination meetings have recently been planned (twice yearly) to consolidate the approach to coordination. The PIU has the intention of identifying at least three small to medium sized investment projects (1-5 M USD) in each of the 6 Black Sea countries related to the management of nutrient reduction, i.e. rehabilitation of key wetlands, introduction of BAP in the agricultural sector, the development of BAT in the industrial and municipal sectors and the development of Public Private Partnerships.

Identified problem/recommendation by WB review	BSERP PIU Response
Furthermore, the project would benefit from stronger collaboration with existing initiatives in the region and more explicit opportunities for information-sharing (workshops, joint research, etc). Also, the monitoring activities could be further strengthened and unified to rapidly identify nutrient/pollutants entering the system (and the polluters!) and use this information to identify hotspots, but also to influence policy-makers to take action and eventually to develop an active and dynamic water quality model.	The project management agree that collaboration with exisitng initiatives will be beneficial. Accordingly, the Project Document has been focussed on the mechanism of cooperation and commonality of the work plans of the ICPDR/DRP for three of the six countries (Bulgaria, Romania and Ukraine). A priority example of a cooperative initiative between the DRP and the BSERP is inter-ministerial coordination planned early in Tranche 2 (Output 1.1/1.2). Monitoring activities/emission inventories and hotspot identification have also been included in Tranche 2 to provide identification and sources of nutrient/pollutants entering the Black Sea (Outputs 2.3, 2.4 and 2.5). The BSERP is also on the advisory board of a further related EU project, the 'European Lifestyles and their effect on Large Marine Ecosystems' (ELME)44. The EU project, which is coordinated by the Chairperson of the ISG activities, Professor Laurence Mee (Plymouth University, UK), brings together the resources of 28 institutions from the EU and aims to provide scenario development modelling to predict the ecological impact on the four European Seas (NW Atlantic, Mediterranean, Baltic and Black Seas) with respect to future European policy development (e.g. accession process) incorporating the socio-economic changes, based on current and projected trends. The BSERP will act to provide support (costs associated with meeting attendance only) for the involvement of countries outside of the EU Accession process. Cooperation through the ELME project will aide the Black Sea in the development of a decision-support system related to eutrophication (recently completed by the HELCOM for the Baltic Sea). The HELCOM approach will serve as a template for development of a similar system for the Black Sea. The data generated by current and planned research activities (ISG), pilot monitoring activities, ARENA45 and land-based nutrient export modelling will serve to populate a Black Sea decision-support model.

Identified problem/recommendation by WB review	BSERP PIU Response
The true success in meeting the objectives of the project may actually be beyond its reach - influencing the practices of farmers all around the Black Sea who contribute to the high nutrient levels. This will require a change in incentives and national policies over the long-term, but the project could at least initiate these processes and demonstrate successful models which support these goals. We actually have some pretty good models for nutrient reduction by farmers in the Poland Rural Environmental Project (where farmers engaged in manure management and better land use), in Romania and in Georgia. All these are GEF/Bank projects designed to implement the TDA/SAP, and need to be scaled up.	The project team agrees that a number of activities are heavily dependent on the countries' willingness on the one hand, and the real situation (i.e. legislation and regulatory base, cultural peculiarities, etc.) in the countries, on the other hand. This is why the project has been designed to initiate these processes rather than to implement them. Successful capacity building and knowledge of countries specificities is vital. For this reason, the Project Document contains a series of training events (hands-on training, workshops, seminars, etc.) and public awareness campaigns aimed at a wider public and communities along with strategic interventions at the highest executive and governing level (e.g. inter-ministerial committees). Economic instruments developed in Tranche 1, for introduction into the Black Sea region, have to be acceptable for the governmental level and understandable and economically attractive to the farmers, for instance.

Istanbul, Turkey
April 2nd, 2004

Appendix T Development of Indicators for Monitoring and Evaluation of Project Results

by Dr. Jan Dogterom, Drs. J.P.E. van Leeuwen, N. Koopmans, G. Robijn. Draft final report was submitted and discussed with the PIU in March 2004.

1. Introduction and background information

The Convention for the Protection of the Black Sea against Pollution (Bucharest Convention) and its 2 protocols came into force in January 1994. The Convention is the institutional frame for pollution control and protection of the Black Sea and it sets a platform for sustainable use of ecological resources and coherent marine management. The Black Sea countries have established the Commission for the Protection of the Black Sea (BSC) to support implementation of the Bucharest Convention.

At present, UNDP/GEF is the major contributor providing support in the frame of the Black Sea Ecosystem Recovery Project (BSERP) and, through this project, is the main international donor to support implementation of the Convention. The Council of the GEF has to be informed on an annual basis by all projects, financed by GEF, on the performance of the projects. Monitoring and Evaluation (M & E) of project results is an indispensable tool for project management. This indicator system should allow to monitor and evaluate project performance and has to comply with the reporting requirements of the GEF Council.

The process of transboundary cooperation has been further stimulated by the requirements of the new Water Framework Directive (WFD) of the European Union (EU), which came into force on 22 December 2000. The Parties to the Bucharest Convention are Candidate-Member or have adopted the EU water policy into their national water policy. The WFD formulates reporting requirements of Member States to the EU to facilitate the evaluation by the Commission of the progress towards the achievement of the WFD objectives. At present methodologies for reporting are being designed and tested. In this context, a system of indicators to monitor and evaluate policy compliance is needed, which should comply with the WFD reporting requirements.

2. Problem definition

a. Why a system of indicators

The improvement of environmental quality in general, incl. in coastal areas and seas, requires many measures, ranging from the establishment of institutional structures to increasing public awareness, or to investments. The process consists of very many, usually small, steps over a considerable period of time. Information collection on the process itself and its results, and proper interpretation and use of this information is crucial for efficient use of scarce resources. A

transparent system of information collection and interpretation is therefore a major activity in marine management.

The efforts of the Black Sea countries to protect the Black Sea are supported by a series of donors of which GEF/UNDP is the most important one at the moment. In December 2001, Phase 1 of the GEF-BSERP started. It is expected, that the Project will continue with Phase 2 per 1 July 2004. According Objective 4, the Project will support the development of indicators for project M & E. The development and application of such a system is required by the donors to the GEF, represented by the GEF Council. The GEF follows its own methodology with regard to the selection of an indicator system, and the proposed system should comply with the requirements of the GEF International Waters Task Force (IWTF, see ref. 4).

At the same time, the new EU-WFD puts new and high requirements on the EU Member States with regard to reporting (art. 15 of WFD). The BSC will report on the basis of the WFD requirements, further made operational by the European Environmental Agency (EEA, see ref. 10 and 11).

3. Concepts

a. General

Application of environmental indicators became a serious reporting tool in the early nineties with OECD started applying indicators in the national environmental performance reviews (see ref. 15) and with UNEP developing global environmental outlooks (see ref. 16). The concept of indicators initially included the cycle: pressure- state-response with OECD distinguishing pressure as indirect pressures (economic activities, demographic developments) and direct pressures (emissions etc). Indicators according this cycle were proposed for environmental issues like climate change, ozone depletion, eutrophication, water resources, biological diversity etc. The cycle was extended in 1994 with impact indicators, proposed by RIVM (see ref. 19). EEA replaced the OECD definition for pressures in 1999 by 2 distinct indicator types: driving forces and pressures (see ref. 20). Since then the concept of the cycle: driving force-pressure-state-impact-response (DPSIR) is widely accepted, eg also by UNECE (see ref. 6) and is now being made operational by EEA (see ref. 17).

EEA is applying this set of indicators for assessment of water resources on the basis of issues: ecological quality, eutrophication, pollution with hazardous substances and water quantity (see ref. 10). The use of the DPSIR cycle however shows that the same individual indicator can be relevant in each issue. This is shown by the latest report of EEA on water (see ref. 10). It is thus questionable whether the issue approach is the most efficient in terms of transparency. In this report an other choice has been made: the DPSIR cycle has been applied in an integrated way, not separating the individual indicators on basis of issues. This approach is considered more appropriate to support decision-making in integrated water resources management. Neither of the concepts mentioned so far addresses the issue of the baseline. The concept of using a baseline is proposed by the GEF Waters Program Indicators Steering Group (see ref. 1) and further stressed by the WB GEF Secretariat (see ref. 4). This concept has been included in the proposals for indicators in this report. The GEF M & E indicator concept is different from the ones developed

by OECD, UNEP and EEA, since it serves a different purpose. In the following paragraphs a more detailed description of each concept is presented.

b. Indicators for GEF M & E reporting requirements

The development of an indicator framework for M & E of GEF International Waters Projects started in 1996 by the former GEF-IWTF. In the 1996 Guidelines for WB-GEF international water projects the distinction was made between performance and process indicators. Performance indicators relate to the environmental and socio-economic impact of a project. *Environmental performance indicators* measure the project's specific contribution to the solution of specific environmental problems. These indicators use the PSR-framework: for each of the components pressure, state and responses indicators should be formulated. Socio-economic impact assessments require another set of indicators, *socio-economic indicators*.

According to the 1996 Guidelines, in addition to monitoring performance *vis-a-vis* project objectives, M&E procedures should also monitor progress in project activities designed to accomplish the stated project objectives. This is measured by process indicators. Traditionally process indicators relate to project inputs and project outputs, like procurement and delivery of goods and services. The 1996 Guidelines recognized the increasing importance of capacity-building, human resource development, and stakeholder involvement for sustainable project outcomes, and recommended that process indicators for these activities should be developed

The importance of process indicators is stressed even more in the 2002 GEF M&E indicators (see ref. 7), and in the description of the implementation of the general policy for the International Waters Projects (see ref. 4). It is recognized that the reversal of environmental degradation in complex transboundary waters may take decades. Even meaningful commitments to joint management improvements may take 15-20 years. This means that process indicators are needed to monitor the actual step-by-step progress toward the adoption of the joint management regimes, country-based reforms, and priority investments. In addition to these process indicators two other types of indicators are recommended, i.e. *Stress reduction indicators,* and *Environmental status indicators.*

c. Indicators for WFD and EEA reporting requirements

The reporting requirements for the WFD are described in art. 15. This article refers to articles 5, 8 and 13, incl. annex VII. In these articles, the principles of information and data collection and assessment (art. 5 and 8) and for the content of the River Basin Management Plan (art. 13 and annex VII) are laid down. These principles are further elaborated in the Guidance Documents, which have been produced by the EU to support harmonized implementation of the WFD. The purpose of the system of reporting is to evaluate policy performance of the EU Member States. At present there is general consensus among international organizations to apply the DPSIR (Driving Force indicator, Pressure indicator, State indicator, Impact indicator, Response indicator) cycle for the assessment of success of environmental policy. The EU-WFD has accepted this approach as the basis for reporting (see ref. 5).

d. GEF and WFD compared

Although serving different purposes, there is a relationship between process indicators, stress reduction indicators and environmental status indicators on the one hand, and the components D, P, S, I, R in the WFD framework on the other hand.

Process indicators, relating to legislation, institution building, etc., are in the present situation in the Black Sea area not real response indicators, in the sense of the DPSIR-cycle. Rather they are indicators of progress in the pre-response phase. Building up institutions, inter-governmental cooperation, legislation etc. are necessary pre-conditions for responding. In this sense the GEF-project should help the Black Sea countries to use the WFD-system in the future, by assisting in the development of different components.

Stress reduction, on the other hand, can be seen as a response in the meaning of the WFD cycle. It is, however, mainly one kind of response, namely direct reduction of pressure. In the WFD cycle different responses are distinguished.

For environmental status indicators according to the GEF it seems, that there is no difference with the status indicators according to the WFD.

In conclusion, there seem to be some possibilities for using indicators developed in the GEF-project also for WFD reporting requirements, but they seem also to be limited. It is still important to keep in mind that GEF related indicators should preferably be compatible with WFD indicators.

e. Indicator selection criteria and data and information requirements

i. Selection criteria

The OECD (see ref. 15 and 18), UNEP (see ref. 16) and very recently EEA (see ref. 17) have published criteria for selection of environmental indicators. The lists of these 3 international organisations show more or less overlap. For the selection of indicators for M & E of the BSERP, criteria have been derived from these lists by combining different criteria from the lists and simplify them for the specific purposes of M & E according the GEF requirements.

For the selection of indicators the following criteria have been applied:

1. Policy relevant (indicators must support decisions);
2. Analytically sound (indicators must be scientifically and technically well founded and robust);
3. Representative (indicators should give an adequate picture of the situation);
4. Measurable (indicators must be based on data readily available, well documented, and

updated at regular intervals); it should be possible to define the baseline;

5. Structural (indicators must be connectable with each other, for instance according to an input-output-outcome scheme);
6. Indicators should have communicative power.

ii. Data and information requirements

Although the indicator system proposed serves primarily the GEF reporting purpose, it would be highly preferable if selected indicators use the same data sets or other sources of information which are shared with the BSC. The indicators need raw data sets and information, which has been or will be collected by GEF-BSERP and/or the BSC Secretariat. The Secretariat has set up, with help of UNDP/GEF and other donors, an extensive system of data and information collection: the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP). Data are collected in existing reporting procedures. Collecting data is costly, and the collection of new types of data or information should be avoided, unless it appears, that data or information, critical for monitoring and evaluating project results and/ or policy compliance by BSC members, is missing.

A large dataset is being collected. The reporting includes 6 templates, which cover the following topics:

- Conservation of Biological Conservation (CBD);
- Pollution Monitoring and Assessment (PMA);
- Integrated Coastal Zone Management (ICZM);
- Land Bases Sources (LBS);
- Fisheries and Marine Living Resources (FOMLR)
- Environmental Safety Aspects of Shipping (ESAS)

Each template consists of a long list of variables, which include legal aspects, organisational aspects, biological, physical and chemical parameters, and many others. These lists of variables are considered a long list, which has been used for the selection of **a full set and a core list** of variables or parameters, that are proposed to be included in the system of project performance indicators.

iii. The problem of the baseline

The indicator system proposed assesses different types of changes: environmental quality, capacity for waste water treatment, institutional settings, public awareness, biodiversity etc. These changes need to be assessed in relation to the process of marine management over time. Therefore, the situation at the start of the process has to be defined: the baseline. According the GEF International Waters Program (GEF-IWP) Indicators Steering Group, the definition of the baseline is the following:

"The situation that existed at the beginning of a Project, defined in terms of intergovernmental institutional arrangements, human activities, which degrade the environment or environment status."

This definition is related to the specific use of an indicator system for the assessment of the process. It concerns indicators of the (change of the) institutional arrangements and human activities, which degrade the environment. It does not include indicators on the (change of the) environment itself. A number of questions have been considered:

1. Using this definition, is the baseline the situation in the basin at the start of the 1st GEF Environmental Program for the Black Sea Basin (BSEP) in 1993 or at the beginning of the present GEF-BSERP in 2001? This limited interpretation would probably be enough for the GEF Council.
2. Is it necessary to use a broader definition for the baseline, and to include the environmental status of the basin at the beginning of the BSEP or at the moment of signing the Bucharest Convention, or the establishment of the BSC Secretariat?
3. Is it preferable to connect the baseline to an environmental objective: the situation in 1997, being the intermediate objective of both the BSC and ICPDR.

For the GEF-DRP a decision on the baseline had to be taken as well. Since the ICPDR has a reliable database on pressures, status and investments (responses) in the Danube basin since 1996, 1996 has been chosen as the baseline. For the GEF-BSERP and the BSC, the database is still under construction. At this moment, only a system of indicators for M & E of the BSERP is proposed and therefore the start of phase I of the BSERP in 2001 is proposed as the baseline.

4. Proposed system of indicators for GEF M & E

a. Introduction

The proposed selection of categories of indicators and individual indicators for GEF M & E is presented in this chapter. The process indicators should have a direct relationship with the objectives, outputs and outcomes, as presented in the Project Document of the BSERP, in particular with the Logical Framework Matrix (LFM). The stress reduction indicators consist of indicators related to implementation of policies; this implies development, implementation and enforcement of policy measures, such as new legislation and regulations, but also investments as a result of policy implementation. According the GEF M & E definition, loads of pollutants are an environmental stress. In the DPSIR cycle, loads of pollutants are pressures and policy enforcement and investments are responses. In the GEF M & E system this distinction cannot be made. Therefore, loads are presented here under stress reduction indicators. State indicators are clearly defined. The categories proposed are based on the present structure of the database.

b. Categories of indicators

i. Process indicators

The basis for selection of process indicators is found in the BSERP Phase II Project Document, in particular the LFM. Ideally the system of process indicators should be part of the LFM of a project. For each objective outputs, outcomes and the related quantifiable indicators should be formulated and methods to measure progress and quality should be defined in advance.

In the LFM of the BSERP, this is only partly done. In order to be able to apply a consistent set of indicators, the structure of the project document and the LFM have to be consistent as a start. The grouping of objectives and the formulation of outputs and outcomes in the **Phase I** document and LFM is not considered consistent. This has been repaired in the Phase II document and LFM. The Phase II LFM has been taken as the starting point and objectives, outputs and outcomes of the Phase I LFM have been rearranged to fit. This way, the categories of process indicators can be directly copied from the project objectives. The following categories are therefore proposed:

1. Consolidation and operation of institutional mechanisms for cooperation under the BSC
2. Development of policy guidelines and legal and institutional instruments
3. Development of economic instruments and promotion of investment opportunities
4. Development of operational systems for monitoring, information management and research
5. Strengthening of public participation

ii. Stress reduction indicators

These indicators should measure the result of interventions by the Black Sea countries that result in improvement of the environmental conditions. These interventions are formulated in policy and legal documents as the Bucharest Convention, the Black Sea Strategic Action Plan (SAP) and other international and national legal documents and regulations. Such interventions should be followed by investments, which should result in a reduction of pollutant loads and recovery of the ecosystem. Any policy cannot succeed without stakeholder involvement and sufficient public support. Therefore implementation of programmes for stakeholder involvement and public awareness rising are considered to contribute to stress reduction. The following categories are proposed:

1. Implementation and enforcement of regional and national legislation and regulations
2. Investments
3. Reduction of pollutant loads by river and the atmosphere
4. Implementation of stakeholder involvement and public awareness raising programmes

iii. State indicators

The stress reduction interventions should result in improvement of the environmental conditions in the coastal zone of the Black Sea and the sea itself. The state indicators should reflect these conditions. The BSC is collecting a vast amount of data on the Black Sea status. The categories

proposed should be based on the information collected at one hand; on the other hand the quality of the ecosystem has to be covered as well. The following categories are therefore proposed:

1. Water quality
2. Ecological quality
3. Biota contamination
4. Sediment quality
5. Fish stocks

c. Individual indicators

i. Process indicators

The GEF has accepted a Result Based Management approach. This means that the emphasis should lie on output and outcome indicators, as the overall performance of the process is measured in these terms. Economy and efficiency are of course necessary, but are in RBM considered mainly as an internal responsibility of the management of the process, with only limited reporting requirements.

The delivery of outputs as planned (timeliness, quantity etc.) is also the responsibility of the management of the process, and it should explicitly be held accountable for this. Whether the outputs will have the desired outcomes, is the joint responsibility of the management and the other stakeholders. They should assess if the outputs in principle have the desired quality. Even when the quality is high, the desired outcome can be absent, due to other factors as the political situation, absence of funding etc.

ii. Framework

The framework used for identification of output and outcome indicators is derived from the Value for Money Analysis (VMA). One starts a production process with a **budget**. With the budget **inputs** are bought, usually manpower and materials. With the inputs certain outputs are produced: products and services or activities. The outputs lead to **outcomes**. In general that is a satisfied customer. In this case the customer (the GEF Council) is satisfied when there are observable changes in development and/or ecological conditions.

Process indicators are indicators, which measure the budget, inputs, outputs and outcomes, or the relationships between them. The most important relationships are:

- inputs/budget – an indicator for the **economy** of the process;
- outputs/inputs – an indicator for the **efficiency**;
- outcome/outputs – an indicator for the **effectiveness**, or quality;
- outcome/budget – an indicator for the value for money; it is the product of the aforementioned three indicators. Economy * efficiency * effectiveness = Value for Money.

The LFM of the Phase II project document has been taken as the departing point and for each activity outputs and outcomes have been distinguished. The tables in Annex I present these activities, the related outputs and outcomes and the individual indicators proposed to measure progress and quality. There are some blank fields in the tables, where outputs are found in the LFM, but corresponding outcomes are missing (indicated by Not Found: NF). This can mean two things: either it has been a deliberate choice not to formulate outcomes, or the outcomes are simply forgotten. In Chapter 6 some examples of individual process indicators will be presented in detail with proposals for measuring progress and quality.

In the 1st column of the tables in annex I, it can be indicated whether or not a specific activity has been completed in Phase I. It is possible in principle to do the evaluation of these activities by using the proposed indicators. For those activities that continue in Phase II, it is recommended to

apply the process indicators for both Phase I and II at the same time, considering Phase I and II as one project.

iii. Stress reduction indicators

The individual stress reduction indicators, grouped according the 4 defined categories, can be found in Annex II. This list is at present considered a provisional list. The following considerations should be regarded and discussed before a final list can be proposed:

- Since 3 Black Sea countries will be EU member in the future, it seems logical to use implementation of EU policy and legislation as a reference. However, 3 countries will not be member. It depends on the parties in the BSC whether EU policy can be used as the point of reference; the advantage of the EU approach is, that at least for 3 countries compliance with EU policy is mandatory.
- The interventions agreed in the BS-SAP could be the reference as an alternative to the EU policy approach; the SAP however has no legal basis.
- Development and application of indicator systems is a priority topic in the EEA (see ref. 17); decisions on a core list will be expected end of March 2004; it is expected that for selected indicators descriptive sheets will be (have been) produced to provide guidance for presentation.
- Application of indicators require high quality data collection and interpretation; the BSIMS is still developing. Final selection of indicators and development of BSIMS is an iterative process and therefore BSIMS should be discussed as well.
- It is possible to distinguish a long list and a core list, the core list being the list to be published and the long list having the purpose of supporting management decisions at the level of the BSC
- A clear distinction could be made of indicators to be reported at national level in the Black Sea countries and indicators to be reported by the BSC to support transboundary cooperation

iv. State indicators

The individual state indicators, grouped according the 5 defined categories, can be found in Annex III. This list is at present considered a provisional list. The following considerations should be regarded and discussed before a final list can be proposed:

- Since 3 Black Sea countries will be EU member in the future, it seems logical to use implementation of EU policy and legislation as a reference. However, 3 countries will not be member. It depends on the parties in the BSC whether EU policy can be used as the point of reference; the advantage of the EU approach is, that at least for 3 countries compliance with EU policy will be mandatory.
- The interventions agreed in the BS-SAP could be the reference as an alternative to the EU policy approach; the SAP however has no legal basis.
- Development and application of indicator systems is a priority topic in the EEA (see ref. 17); decisions on a core list will be expected end of March 2004; it is expected that for selected indicators descriptive sheets will be (have been) produced to guide presentation.

- Application of indicators requires high quality data collection and interpretation; the BSIMS is still developing. Final selection of indicators and development of BSIMS is an iterative process and therefore BSIMS should be discussed as well.
- It is possible to distinguish a long list and a core list, the core list being the list to be published and the long list having the purpose of supporting management decisions at the level of the BSC
- A clear distinction could be made of indicators to be reported at national level in the Black Sea countries and indicators to be reported by the BSC to support regional cooperation and implementation of the Bucharest Convention.

5. Discussion

In this report, a proposal for an indicator system for GEF M & E is presented. The main issues to discuss have been formulated in chapter 4. Final decisions on a long list and core list depend on answers to these questions and should primarily be taken by the end users. At the same time, the use of indicators in water management is topic of an ongoing debate in the EU and the EEA (see ref. 17). Also for GEF M & E this debate is relevant, since indicators systems for either GEF or EU should preferably be harmonized. It is at present not clear what the outcome of the EU debate will be although answers are expected in the near future. EEA will probably present methodologies for quantification and presentation of the selected list of indicators. A beginning has been made already with the production of these descriptive sheets.

EEA has chosen in its recent report (see ref. 10 and par. 4.1) to use the DPSIR cycle in the context of issues: eutrophication, pollution with hazardous substances etc. For GEF M & E this question seems not to be relevant. For policy compliance assessment this approach has advantages. The proposed system for stress reduction and state indicators in this report could be rearranged on an issue basis. Many indicators are related to different issues and thus should be reported under a number of issues. The choice for a yes/no issue related presentation could be taken after the final list of core indicators has been chosen. Finally, the use of aggregated indicators should be investigated also after some of these questions have been answered.

6. Proposal for the development of an indicator system to assess policy compliance by the Black Sea countries

The indicator system for GEF M & E serves specifically the reporting requirements for the GEF BSERP to the GEF Council. In par. 4.3, the principles of the reporting requirements for EU Member States in the frame of the WFD for policy compliance evaluation has been described. A proposal for an indicator system for the Danube basin for the latter purpose has been presented to the GEF-DRP and the ICPDR. A similar system of indicators to evaluate policy compliance of the parties to the Bucharest Convention is yet to be developed.

The basis of policy compliance evaluation by the Black Sea countries is provided by the provisions of the Bucharest Convention and its protocols, further elaborated in the BS-SAP. For 3 countries, Romania, Bulgaria and Turkey, the requirements of the WFD will also apply in the future since it is expected, that they will become EU member. The proposed system for the Danube basin can be used as a starting point for further development of such a system for the Black Sea countries. The principles will be the same, even for the countries not becoming EU member in the foreseeable future and there is overlap with the proposed GEF M & E indicator system. In chapter 4, a number of considerations have been presented to discuss before the proposal for the GEF M & E indicator system will be finalized. It seems premature to start working on a proposal for the development of an indicator system for policy compliance until these issues have been discussed and the GEF system has been finalized, the more so since the WFD indicator system for the Danube is also still under discussion and EEA is still working on a proposal for a core list of environmental indicators. It is proposed to postpone the development of

a proposal to develop policy compliance indicators for the Black Sea countries until the GEF systems for the BSERP and DRP and the WFD system for the DRP have been concluded.

LITERATURE

1. Draft for Discussion at the second biennial GEF International Waters Conference, Dalian, China, September 25-29, 2002, by the GEF International Waters Program Indicators Steering Group
2. Development of process, stress reduction and environmental status indicators to monitor nutrient reduction and its effects in the Danube river and the Black Sea, by the ICPDR with UNDP/GEF Assistance, August 2000
3. Conceptual Framework to develop and use Water Indicators by Manual Winograd et al. August 1999, CIAT and World Bank, Cali, Columbia
4. Monitoring and Evaluation Indicators for GEF International Waters Project, Monitoring and Evaluation Working Paper 10, Al Duda, November 2002
5. Guidance for the analysis of pressures and impacts in accordance with the Water Framework Directive, EU Impress working group, page 15, November 2002.
6. Guidelines on Monitoring and Assessment of Transboundary Rivers, UN-ECE Task Force on Monitoring and Assessment, page 22, March 2000
7. GEF, Monitoring and Evaluation Polices and Procedures, Global Environment Facility, Washington DC, 2002
8. Integrating Capacity Development into Project Design and Evaluation, Approach and Frameworks, Lusthaus, Adrien & Morgan, GEF Monitoring and Evaluation Working Paper 5, December 2000.
9. EEA, Environmental benchmarking for local authorities, Bolli et al., 2001
10. EEA, Europe's water: an indicator based assessment, Topic Report 1/2003, November 2003.
11. Testing of indicators for the marine and coastal environment in Europe, parts 1, 2 and 3, Technical reports no.s 84, 85 and 86, European Environment Agency, 2002.
12. Indicators to monitor the effectiveness of coastal zone management, BSERP document, 2003.
13. Stephen Olsen et al., A Common Framework for Learning from ICM Experience, Coastal Resources Center, University of Rhode Island
14. Latvian Environment Agency, Environmental indicators in Latvia, 2002
15. OECD, OECD Core set of indicators for environmental performance reviews, Environment Monographs, no. 83, 1993
16. UNEP, An overview of environmental indicators: state of the art and perspectives, UNEP/EATR.94-01, 1994
17. EEA, Internal document, Doc.EEA/BU/32/06, EEA Core set of indicators, 2004

18. OECD, Environmental Indicators: towards sustainable development, 2001
19. RIVM, Towards a global environmental outlook II: scanning the global environment, designing a framework for UNEP's reporting functions, 1994
20. EEA, Environment in the European Union at the turn of the century, 1999
21. S.O. Funtowicz et al., Information tools for environmental policy under conditions of complexity, EEA, 1999
22. S.M. Garcia et al., The FAO guidelines for the development and use of indicators for sustainable development of marine capture fisheries and an Australian example of their application, Ocean and Coastal Management, 43, 537-556, 2000
23. USAID, *Monitoring the Policy Reform Process*, Recent Practices in Monitoring and Evaluation Tips, 2000, Number 14.
24. EEA, *Progress in Coastal Management: Indicator Fact Sheet ICZM*, TEC003.
25. Committee for the activities of the Council of Europe, *European Code of Conduct for Coastal Zones*, 1999.
26. S.B. Olsen e.a., *A Manual for Assessing Progress in Coastal Management*, Rhode Island, 1999.
27. Y. Henocque, "Development of process indicators for coastal zone management assessment in France", *Ocean & Coastal Management* 46 (2003) 363-379.
28. Government Audit Policy Directorate of The Netherlands Ministry of Finance, *Government Governance*, 2000. (http://www.minfin.nl)
29. Nutrients as a transboundary Pressure in the DRB, ICPDR-UNDP/GEF, February 2004

Websites:

30. BSC: bsc-commission.org
31. BSERP: blacksea-environment.org
32. ICPDR: icpdr.org
33. EEA: eea.eu.int
34. EU: europe.eu.int
35. OECD: oecd.org
36. GEF: gefweb.org
37. WB: worldbank.org
38. Latvia: lva.gov.lv

ANNEX I:
Process indicators

Ph1	Ph2	Outputs	Indicators	Outcome	indicators

1. Consolidation and operation of institutional mechanisms for cooperation under the BSC

	1.2	PIU operational	Number of staff	Progress project	$$ contract; exhaustion budget
		Functioning BS Steering Group	Meetings, attendance	Evaluation progress project, advice	Assessment stakeholders
		Advisory Groups functioning	Number, scope, meetings, attendance	Advices	Assessment stakeholders
		Coordination activities BSERP & DRP	Formulation common management objectives	Common activities	Assessment stakeholders
	1.1	Mechanism for exchange of information with BS River Basin Committees	Frequency exchange information; scope subjects	Learning effects	Self-assessment River Basin Committees
	1.2	Exchange of information with other BS environmental projects and agencies	Number of organizations involved; frequency exchange information; scope subjects	Learning effects	Assessment stakeholders
	1.2	Establishment national project support systems	Number of staff; financial and human capacity support from government and NGO's	Support	Scope activities; assessment stakeholders
	1.1	National Coordinating Mechanisms reinforced or set up	Breadth involvement departments, local administrations and other organizations	Coordination national activities	Scope activities; assessment stakeholders

2. Development of policy guidelines and legal and institutional instruments

	2.1	Protocol for LBA revised and submitted for national negotiation	Y/n	Acceptance by BSC and individual governments	Review/approval/ratification
	2.2	Concepts for ICZM reviewed and concepts for national strategies developed	Y/n	N.F.	N.F.
	2.2	Pilot project for marine protected area	Scope project; Financial and human capacity support	Demonstration marine protection	Dissemination results Assessment stakeholders

		started	from government, local administrations and NGO's		
	2.2	Pilot project for restoration and management of wetlands started	Scope project; Financial and human capacity support from government, local administrations and NGO's	Demonstration wetland management	Dissemination results Assessment stakeholders
	2.2	ICZM National Focal Points strengthened and supported	Financial and human capacity support from government and local administrations	Scope and quality products	Assessment stakeholders
	2.3	Proposals for BAP	Assessment stakeholders Involvement governments and other stakeholders, as assessed by these stakeholders and PIU	Adoption BAP in national policy	Application in coastal zones; assessment by stakeholders; dissemination results
	2.4	Proposals for BAT in industrial and transport sectors	Assessment stakeholders Involvement governments and other stakeholders, as assessed by these stakeholders and PIU	Adoption BAT in national policy	Application in coastal zones; assessment by stakeholders; dissemination results
	2.5	Proposals for policies for pollution reduction for the municipal sector	Assessment stakeholders Involvement governments and other stakeholders, as assessed by these stakeholders and PIU	N.F.	N.F.
	2.6	Proposals fisheries-free zones and a legal binding document on fisheries	Assessment stakeholders Involvement governments and other stakeholders, as assessed by these stakeholders and PIU	N.F.	N.F.

3. Development of economic instruments and promotion of investment opportunities

	3.1	Proposals for application of economic instruments for nutrient control	Assessment stakeholders Involvement governments and other stakeholders, as assessed by these stakeholders and PIU	N.F.	N.F.
	3.2	Investment programme, including prioritization, for WWTP's	Involvement governments and other stakeholders, as assessed by these stakeholders and PIU; involvement	N.F.	N.F.

			IFI and bilateral donors		

4. Development of operational systems for monitoring, information management and research

	4.1	Proposal for BS Monitoring Programme	Accordance to EU requirements;	BS monitoring programme operational	Monitoring institutions in all BS countries operational; adherence to QA/QC procedures
	4.2	BSIS operational	Intranet and internet sites established	Exchange of information	Frequency of use; speed of exchange of emergency messages; quality of Environment Reports (peer assessment)
	4.3	Research Programme designed	Quality (peer review)	Research programme implemented; capacity building with local scientists	Number of national scientists involved; number of reviewed scientific papers;

5. Strengthening of public participation

	5.1	Support for NGO's by regional consultation meetings and stakeholder training	Participation in workshops; assessment quality by participants	Improvement capacities	Enhanced cooperation between governments and NGO as assessed by parties; improved capacity for fundraising ($$)
	5.1	Support for NGO publications	Number, dissemination	Increased awareness with the public	Public polling
	5.2	Small Grants Programme	Number, scope, activities	Increased awareness with the public; capacity building with NGO's	Public polling; involvement third parties;
	5.3	Information for mass media	Frequency and number of publications/broadcasts; scope subjects	Increased awareness with the public	Public polling
	5.3	Environmental education in schools	Number of pupils reached; quality assessed by teachers and pupils	Increased awareness	Self-assessment by pupils

ANNEX II:
Stress reduction indicators

1. Implementation and enforcement of regional and national legislation and regulations

1. Implementation of Bucharest Convention and its protocols (unit: compliance)
2. Implementation of Fisheries Convention (FISH08; FISH13; FISH14; FOMLR reporting list, unit: ratification and compliance)
3. Implementation of EU Water Framework Directive, 2000/60/EC (WEC08; unit: compliance with time schedule per article)
4. Implementation of EU Nitrates Directive, 91/676/EC (WEC08; AGRI06; AGRI07; unit: designated areas)
5. Implementation of EU Urban Waste Water Treatment Directive, 91/271/EC (WEU09; WEU16; WEC08; unit: % waste water treated, % population connected)
6. Implementation of EU Habitat Directive, 92/43/EC (BDIV06; BDIV10; BDIV12; unit : designated areas)
7. Implementation of EU Bird Directive, 79/409/EC (BDIV08; unit: designated areas)
8. Implementation of EU ICZM recommendations (TECO1; TECO2; TECO3; ICZM reporting list, unit: adoption and enforcement)
9. Implementation of Bern Convention (CBD reporting list, unit: ratification and compliance)
10. Implementation of contingency planning (ESAS reporting list, unit: adoption and enforcement)
11. Implementation of wetland and lagoons management plans (unit: adoption and enforcement)
12. Implementation of non-indigenous species management plan (unit: adoption and enforcement)
13. Implementation of sustainable tourism master plan (TOUR12; TOUR16; unit: adoption and enforcement)

2. Investments (unit: Euro)

14. Investments in canalization and municipal waste water treatment plants (WWTP-M) (WEU09; WEU16)
15. Investments in industrial waste water treatment plants (WWTP-I)
16. Investments in clean technology (BAT)
17. Investments in best agricultural practice (BAP), (WEC08; AGRI06; AGRI17)
18. Investments in renewable energy
19. Investments in cleaning of waste dump sites (TEP01)
20. Investments in safe shipping and pollution abatement equipment (ESAS reporting list)

3. Reduction of pollutant loads by river and the atmosphere (unit: tons, frequency, LBS and ESAS reporting lists)

21. Reduction of organic pollution loads (WEU05; WEU08)
22. Reduction of nitrogen loads (WEU06; WEU07)
23. Reduction of phosphorous loads (WEU06; WEU07)
24. Reduction of accidental/oil spills (WHS10; WHS11; WHS12; WHS15)
25. Reduction of metal loads (WHS07; WHS08; WHS09)
26. Reduction of organic micropollutant loads (WHS07; WHS08; WHS09)
27. Reduction of bacteriological and viral pollution (WEU11)

4. Implementation of stakeholder involvement and public awareness raising programmes

28. Implementation of Arhus Convention (unit: ratification and compliance)
29. Implementation of EU Water Framework Directive, 2000/60/EC (unit: compliance with article 14)

ANNEX III:
State indicators

1. Water quality (unit: concentration)

1. PMA parameter list (WHS04; WEU04; WEU11; WEU13; WEU14; WEU15)

2. Ecological quality (WEU12; WEU13; WEU14; WEC01; WEC02; WEC06; unit: reference values, index, frequency, hectares)

2. CBD parameter list
3. Flagship species
4. Non-indigenous species (WEC07)
5. Protected areas(BDIV06; BDIV12; WEC03, c and d: aquatic habitat quality; TELCO5: landscape diversity)

3. Biota contamination (unit: concentration)

6. PMA parameter list (WHS06; WHS14; FISH07a)

4. Sediment quality (unit: concentration)

7. PMA parameter list (WHS05)

5. Fish stocks (FISH01; FISH05; FISH11; units: tons/ biomass)

8. FOLMR parameter list
9. Annex II, Table 7 John Caddy

Appendix U Economic Instruments for the Protection of the Black Sea

By **eftec, 16 Percy Street, London W1T 1DT, tel: 44 (0) 20 7580 5383, fax: 44 (0) 20 7580 5385, email: eftec@eftec.co.uk, www.eftec.co.uk**

1. INTRODUCTION

1.1. Objectives

This study is undertaken to address the Activity 7.1 of Objective 7 of the Project Implementation Plan of the Black Sea Ecosystem Recovery Project (BSERP). Thus, it aims to *"review the implementation of economic instruments for protecting the Black Sea from pollution (including nutrients) on a country-by-country basis and suggest improvements where relevant"*.

The tasks include:

- carrying out a study on economic instruments based on the currently readily information;
- gathering information about specific economic instruments in each the Black Sea country through the questionnaire;
- reviewing the application of economic instruments in each of the priority economy sector in the Black Sea riparian countries with the objective of reducing the eutrophication problem in the Black Sea; and
- providing the terms of references for Phase II of the BSERP of the work to develop detailed design to prepare short listed economic instruments for implementation.

1.2 Scope and methodology

This report builds on the work completed to date or ongoing in other parts of the Project as well as other literature (such as the OECD / EEA database and reviews of environmental policies in the countries of Eastern Europe, Caucasus and Central Asia (EECCA)). Among the work completed for the Black Sea Ecosystem Recovery Project, the discussion paper by Barr and Reynolds[46] is of special importance as its Appendix C lists relevant economic instruments and provides examples of their use in Europe in general and the region in particular.

In expanding the currently available work, the scope of this study is defined in terms of the priority environmental problems and economic sectors. The priority environmental problem is euthrophication. Therefore, the review of economic instruments is limited to those which can be used to address this problem. The priority economic sectors are determined as: households, industry and agriculture. This affects the selection of

economic instruments to those that are relevant to these sectors. Finally, economic instruments that could be relevant at a single country level and those that are relevant at the regional level are covered in the review.

The study is to be undertaken by a team of local experts and international consultants. This first report is the product of the international consultants, while the final report – especially the shortlist of recommended economic instruments – will be the product of the whole team.

1.3 Report structure

The report contains six chapters in total. Following this introduction, there area:

Chapter 2 – contains general information about economic instruments. This aims to provide information to all readers as well as provide a consistent set of definitions for local experts to follow when they prepare the national review reports.
Chapter 3 – presents the current experience with economic instruments in the Black Sea countries (Sections 3.1 – 3.6). The Chapter is organised in terms of the Black Sea countries. Each country chapter will be a summary of the National Review Reports to be prepared by the local experts. This summary will include an overview and information about the experience with economic instruments in each country in households, industry and agriculture sectors, and other economic sectors if relevant to the solution of euthrophication of the Black Sea. The chapter summarises the common elements of the experience in the region (Section 3.7) and, for comparison, international experience (Section 3.8).
Chapter 4 – contains the short list of economic instruments. These will be the instruments the study team recommends for taking forward in Phase 2 of BSERP. While all three priority (and possibly other) economic sectors will be kept in mind when reviewing the experience of economic instruments in the region, recommendations may concentrate on the sectors that are the most important or that offer the most feasible conditions for successful implementation of economic instruments. Such sectors could be different for different countries (to be completed).
Chapter 5 – contains conclusions and next steps (to be completed).
Chapter 6 – references.

The report also contains a number of Annexes. Currently, there is one Annex, namely, National Review Report outline. Another Annex will be terms of reference for undertaking detailed design projects for the recommended economic instruments.

2. ECONOMIC INSTRUMENTS

2.1 What are and why economic instruments?

A comprehensive definition of economic instruments (EIs) is a rather difficult task because of the diverse set of policy measures comprising them. Generally, it is

distinguished between market-based economic instruments and non-market based ones. The main focus of this report is directed to the former but the latter are not completely excluded in the study because the effectiveness of EIs in reality depends on the right mix of the two types, i.e. to develop a policy package combining market-based and non market-based economic instruments.

The theoretical rationale behind this type of intervention is to secure an optimal level of pollution and to achieve optimum rates of resource use and depletion. The key difference between the two types is that the former relies on the market mechanisms as markets are seen as an efficient means to the allocation of scarce resources and the latter rely on regulations.

The practical reason for implementing market-based economic instruments is to send out a signal that the use of a resource imposes costs on others, i.e. some form of external costs which are not covered in the price of the product or service. To overcome such environmental problems economic instruments, such as environmental taxes, can be introduced aiming to serve as an incentive both to be more efficient in resource use (thereby decreasing total demand and reducing environmental damag) and/or generating revenue. These two aims can at times be mutually exclusive. For example, a tax that is high enough to create an incentive for polluters to stop polluting would not generate much revenue since polluters would rather spend to reduce pollution than pay the tax.

The main reasons for many environmental problems, such as environmental pollution or the over-extraction of natural resources, can be traced back to two fundamental causes: (i) policy failure and (ii) market failure.

(i) Policy failure arises from government policies that generate 'perverse' incentives with regard to the uses of resources and pollution behaviour. In other words, these policies encourage overexploitation of resources and excessive amount of waste and other emissions. The policy failure shows itself in the form of environmentally damaging subsidies. These are those subsidies that are put in place to enhance the competitiveness of certain products, processes, economic sectors, or regions and that together with the prevailing taxation regime (unintentionally) discriminate against sound environmental practices. Furthermore, such environmentally damaging subsides can be found in the water pricing regimes preventing water users from facing the full cost of water use.

To recommend and implement new economic instruments to reduce pollution, while such environmentally damaging subsidies are still in place cannot be an efficient policy. Therefore, policy analysis, and this study which is an input to policy analysis, has to investigate the existence of environmentally damaging subsidies in relevant economic sectors and country. Identification and removal of such subsidies will not only have environmental benefits and lead to substantial budgetary savings but often with the consequence of the users of the natural resources facing higher bills. Removing subsidies is by no means easy – especially considering the political, competitiveness and distributional implications.

However, examining policy failures in the context of 'perverse' incentives and answering the questions how to overcome and/or abolish them is crucial for this study. Therefore, an analysis of the institutional framework and the economic and legal institutions implemented in the different countries will be undertaken.

(ii) Market failure, on the other hand, refers to the lack of actual markets for certain environmental goods or services and/or the failure of conventional markets to consider the environmental impacts of man-made goods and services or exploitation of natural resources. In other words, prices in actual markets generally do not reflect the 'true' or 'full' cost of producing the goods and services, leading again to overexploitation of natural resources and excessive amounts of waste and other pollution. The environmental impacts, therefore, are external to the market mechanism, and are often referred to as 'externalities'. The use of economic instruments, such as taxes, is a common approach to internalise these externalities in the price of the goods and services and as mentioned above is in accordance with the polluter pays principle.

Economic instruments, in particular taxes and charges, have been introduced as one way to implement the Polluter Pays Principle (PPP), which has become widely accepted as the general framework for internalising environmental externalities. In 1972, the principle was adopted by the OECD Council as an economic principle for allocating the costs of pollution prevention and control (OECD 1972). The primary concern of the Council in 1972 was to address the international economic and trade implications of environmental policies. The OECD recommendation provides guidelines that place restrictions on the role of government subsidies in order to ensure that polluters pay the costs of protection measures made necessary by their activities. With regard to environmental protection measures, the Council (OECD 1972, Annex, A.4) found that they *'…should not be accompanied by subsidies that would create significant distortions in international trade and investment*.' Rather, by placing costs of pollution prevention on polluters, the PPP demands that the cost of protection activities be reflected in the market prices of goods and services.

The integration of environmental concerns into economic growth and development policies has emerged as a priority concern of modern environmental policies since the 1970s. During the 1970s and 1980s, environmental policies in industrialised countries of the OECD were based primarily on a system of regulations. However, it became increasingly recognised that traditional regulatory environmental policy, despite some successes, failed to address new environmental pressures and prevent further unacceptable environmental damage. Moreover, these policies imposed potentially high costs to achieve environmental quality objectives. In recent years, economic instruments, as opposed to "command and control" regulations, have been recognised for their flexibility and cost-effectiveness in attaining environmental objectives (OECD 2001, EEA 2000). However, examples show that economic instruments can only be effective under the condition of the existence of a functioning institutional framework[47] as a report published by World Bank summarises:

'In a country where environmental regulations are not enforced and environmental agencies are weak, economic instruments are not of much help either. Introducing pollution charges should go along with improving the overall environmental policy framework and strengthening the institutional capacities of environmental agencies' (World Bank 1998, p. 166)

Another reason for the widespread application of market-based environmental policy instruments was their successful implementation. Examples of this are water effluent charges in several European countries, such as France, Germany and the Netherlands, in the 1970s/80s coming as a consequence of substantial water pollution problems in many rivers, like the river Rhine.

As mentioned above, policy makers showed a growing interest in market-based instruments for environmental policy during the 1980s. An early indication of this change was the emphasis given to economic instruments in environmental policy by the report of the World Commission for Environment and Development in 1987. Furthermore, the Rio Declaration on Environment and Development (1992) discussed economic instruments, and in particular the Principle 16 states:

'National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.'

The advantages of the use of economic instruments is furthermore highlighted in a recent EC publication (EC 2000, p.3): 'The use of economic instruments, such as taxes, subsidies or other incentive payments, or tradable emission permits, will frequently offer a more effective means of achieving environmental policy objectives than traditional environmental policy instruments such as direct regulation of polluting activities.'

The interest in the implementation of market-based instruments became an essential part of policy to combat environmental pollution, such as climate change and water pollution, in many European countries. Such development did not exclusively occur in those countries but also in many developing countries and countries undergoing transition to market economy. Countries of Eastern Europe, Caucasus and Central Asia (EECCA) as well as Central and Eastern European Countries (CEECs) introduced economic instruments for environmental policy in the early 1990s or even earlier. However, a major difference in the instruments implemented in western European countries compared to the situation in the economies in transition can be recognised: the former relied mainly on product taxes, such as energy taxes, while the latter introduced a rather complex system of pollution charges covering a very large number of air emissions and water effluents and in addition the generation of solid wastes.

2.2 Types of economic instruments

As mentioned above market-based economic instruments (EIs) comprise a rather broad group of policy instruments. Their common element is found in their reliance on market price mechanisms to internalise costs and provide financial incentives to economic actors.

Because of their flexibility, these economic instruments are traditionally discussed in contrast to regulatory or "command-and-control" instruments. While theoretical treatments often consider market-based EIs as alternatives or substitutes to regulatory instruments, the margin between the two is sometimes very narrow. Many of the most effective examples of achieving environmental policy targets illustrate that regulatory and economic instruments are interrelated and complementary.

Moreover, several environmental pressures exist for which the application of market-based economic instruments is not an effective policy tool. For example, economic instruments may not be appropriate in areas such as hazardous wastes, or concentrated "hot spot" pollution areas that pose a risk to public health. In such cases, the use of EIs is limited and needs to be utilised in conjunction with other policy measures.

Evaluations of the different instruments applied in environmental policies show that EIs are regularly introduced in parallel with other policy measures, so it is often difficult to isolate the impact of the instrument when reviewing environmental quality trends.

Some of the most common economic instruments in use today can be distinguished between

those that use the (existing) markets; and
those that create new markets.

Instruments that *use the existing markets* involve moving towards free market prices on the one hand (by removing or reducing subsidies and perverse incentives, i.e. policy failures) and moving beyond free market prices (by addressing market failure) on the other.

Instruments that *create new markets* are a rather new approach to solving environmental problems. These instruments are affecting prices not directly but by designing an institutional and regulatory framework addressing current shortcomings and failures in environmental policy.

2.2.1 Economic instruments using existing markets

Economic instruments belonging to this group are generally more common today and the following instruments belong to this category.

Subsidy removal or reduction is a classic and well-known example of policy reform: reduction in or elimination of subsidies normally results in reduced environmental impacts (from reduced use of the previously subsidized factors) and monetary savings to the Governments. Subsidy removal, however, is only the first step.

Environmental taxes and charges can then be used to reflect the additional costs to others (externalities) that are created by the use of resources. Environmental taxes and charges can be based on emissions, inputs and outputs. Based on varying concepts of the role and purpose of these instruments in practice, however, a generally accepted definition of the term "environmental taxes and charges" does not exist in current literature.

The current widely accepted definition by the European Commission, the European Statistical Office (Eurostat) and the OECD is based on the rationale that an environmental tax is defined through the tax base. According to this definition, an environmental tax is '*a tax whose tax base is a physical unit (or a proxy of it) that has a proven specific negative impact on the environment*' (OECD 1997 and EC 1997). Further, a distinction is generally made between the terms tax and charge. '*Taxes are defined as: compulsory, unrequited payments to general government. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments. Charges or fees are defined as compulsory requited payments to either general government or to bodies outside general government, such as for instance an environmental fund or a water management board*' (OECD 1999).

This distinction is important for the analysis in the Black Sea region. While taxes may be earmarked for certain purposes — and are in some OECD countries as well as in CEECs and EECCAs — the term charge has generally been applied in CEE and EECCA when their explicit role is for raising revenues for environmental funds.

As environmental concerns received greater attention, environmental taxes were recognised by public policy makers for their potential to simultaneously address environmental concerns, finance public services, raise public revenues and potentially replace other taxes. Today, a commonly used classification of taxes and charges distinguishes between three types, based on their function in public/environmental policy:

• **revenue-raising taxes**, which may influence behaviour but still yield substantial revenues over and above that required for related environmental services or regulation.

• **incentive taxes**, which are levied with the objective of changing environmentally damaging behaviour without the intention to raise revenues. Indeed, the success of such a tax may be judged by the extent to which initial revenues from it fall as behaviour changes.

• **cost-covering charges or user charges/fees**, whereby those making use of the environment contribute to or cover the cost. This type of EIs recognises that many individuals as well as the economic sectors receive important benefits from the use of the environment, but may pay very little or nothing for this right, often leading to poor levels of service or overuse of the resource. The introduction of user charges is one way to capture part of this benefit, improve levels of management and service, and share the

benefits from exploiting natural resources. User charges are, for example, being increased for public provision of water and sanitation services, thereby allowing for an improved level of service and increased overall welfare. The level of a cost-covering charge is determined by the service it is intended to deliver and revenues are primarily used to finance collective services, e.g. water supply, wastewater and waste collection.

These three types of environmental taxes are not mutually exclusive: a cost-covering charge may have incentive effects, for example to encourage the rational use of water, an incentive tax may raise revenues, and revenue-raising tax may be partially used for related environmental purposes. In particular, cost-recovery user charges must resemble pure market prices for a good or service, and play an important role both as a financing tool for public services, i.e. covering the full-costs of delivering the service and incentive instruments that reduce environmental pressures. In practice, the design of overall tax regimes and the environmental concerns being addressed tend to influence which of these functions is primarily being served. Moreover, the type of instruments selected may also determine their impact on broader public policies.

Markets are also useful in establishment of **performance bonds** and **deposit-refund systems**. In both cases a financial bond or deposit is used to guarantee compliance with the desired outcome such as meeting environmental standards or by correctly disposing of waste products. The existence of the deposit or bond helps ensure that the financial costs of non-compliance are sufficiently high that firms and individuals take the necessary steps to protect the environment.

A last category of economic instruments that use existing markets is **targeted subsidies**, where an explicit subsidy is offered to achieve a socially desirable outcome. Although these go against the general trend of subsidy removal, there are cases when such subsidies may be justified. This could especially be the case for projects for public-private partnerships or small/medium sized bankable projects. In fact, the Global Environment Facility projects like the Black Sea Ecosystem Recovery Project can be said to be a form of targeted subsidy.

2.2.2. Economic instrument – creating new markets

The second group of economic instruments, i.e. those that *create new markets*, involves defining property rights, privatising and decentralizing, establishing tradable permits and rights, and creating international offsets.

Establishing property rights, privatisation and decentralization can play an important role in moving many aspects of environmental management out of the state sector, which is often starved for capital, and into more commercial operations where there is strong incentive both to generate revenue and to make investments that will increase revenue in the future. Water and sanitation works are typical examples of these.

Tradable permits and rights involve the explicit creation of a market in environmental resources, encouraging efficient use and fostering the recognition that these resources are

scarce and valuable. For the tradable permits to function well, first, the permit must actually create a property right. Second, the question of initial allocations of permits must be handled equitably. Finally, there must be no artificial obstructions to trading permits.

International offset systems extend the notion of a market for environmental resources across country boundaries, permitting firms and institutions to meet environmental objectives by purchasing abatement wherever on the globe it is cheapest. Carbon offsets and joint implementation projects are examples of this. Again the potential for international offset systems or a regional tradable permit system for the Black Sea will be explored during this study taking into account the lack of relevant experience in the region and the extent to which a trading market can work effectively. 'Debt for nature or environment swaps' can be characterised as a form of such international offset systems. The concept behind this approach is to reduce the debt burden of a country by making an agreement between the indebted country and the creditor countries. This deal grants the possibility to write off some of the debt on the condition that the released funds are used for environmental protection.

In addition to these economic instruments, **voluntary approaches** have increasingly been used (e.g. currently the UK government is negotiating a voluntary agreement with pesticide producers and farmers). There are many different types of voluntary approaches, with an equally wide range of terminology used to describe them. However, they can be usefully classified into the following three broad categories:

unilateral commitments: where individual firms, or groups of firms set up environmental improvement programmes without any external involvement and communicate these to their stakeholders;
public voluntary schemes: where public bodies develop general schemes that define minimum standards of performance, and individual firms decide whether to join (eco-labelling is an example for this type of economic instrument); and
voluntary or negotiated agreements: where Government interacts with firms (either individually or collectively) to agree a performance target (or targets) and to define the commitments and/or obligations of both sides.

To date, the experience with economic instruments belonging to this second group, such as the voluntary agreements implemented in the industrial and agriculture sectors in the Black Sea countries is not extensive. Nevertheless, this study includes voluntary approaches in the list of economic instruments at least with a view to assess their potential use in the future.

2.2.3 Summary

Finally, regardless of the type of economic instrument, the importance of the institutional framework has to be mentioned. Any environmental policy tool requires a well-structured and enforced regulatory system to be in place. This is especially the case for the removal of environmentally damaging subsidies and the introduction of any new economic

instruments. These require not only a well-functioning environmental policy but also well functioning markets as well as economic, taxation and financial systems to be in place.

There are many examples around the world of perfectly designed pollution charge systems not being effective due to the lack of a well functioning institutional framework, weak enforcement authorities and hence ineffective environmental policy. In order to avoid this fate, this study will also focus on the currently available institutional framework in the countries, likely future changes (e.g. the influence of EU policies) and the requirements for institutional framework if new economic instruments are to be implemented. While some requirements are complex and may be difficult to implement in the short term, others such as ensuring that user fees increase at least at the level of inflation (e.g. currently not implemented in Turkey) so as not to loose their impact are much simpler.

Table 2.1 presents the types of economic instruments a review of this kind should look at – considering each of the relevant sectors and pollution types.

Table 2.1: A general typology of economic instruments								
Sector	**Using markets**							
	Subsidy removal / reduction	Environmental taxes on			Cost covering charges - user fees for		Perform-bonds/deposit refunds	Targeted subsidies
		Emissions	Inputs	Products (outputs)	Nat. resources	Services		
Water resources	Reduction in water subsidy				Water resources taxes	1.)Water pricing 2.)Watershed protection charges		
Sustainable agriculture / soil protection	Reduction in agriculture subsidies		Taxes on pesticides and fertilisers					Subsidies for phasing out pesticides and fertilisers
Biodiversity/protected areas	Reduction in land conversion subsidies				Bio prospecting fees	1.)Watershed protection charges 2.)Park entrance fees		Habitat protection subsidies
Air pollution	Reduction in energy subsidies	Emission taxes	1.)Energy taxes 2.)Differentiated gasoline prices	Environmentally related product taxes	Royalties for fossil fuel extraction		Refund systems (for example for sulphur)	Subsidies for industrial / household energy saving measures
Water pollution	Reduction in wastewater subsidy	Water effluent taxes				Sewage charges		Tax relief and subsidised credit for environmental investment
Solid waste	Reduction in waste subsidy	Waste disposal taxes				User fees for waste management	Deposit-refund systems	Credit/subsidy policy
Hazardous waste/toxic	Reduction in agrochemical		Product taxes				Bond for waste	

chemicals	subsidies						treatment	

Table 2.1: Continued…				
Sector	**Creating markets**			
	Property rights/decentralization	Tradable permits/rights	International offset systems	Voluntary approaches
Water resources	Water rights	Water markets	Water trading across borders	
Sustainable agriculture	1.)Land ownership 2.)Participatory irrigation management	Transferable development rights		
Biodiversity/protected areas	Biodiversity patents and bio prospecting rights	International tradable conservation credits	Tradable conservation credits; debt-for-nature swaps	
Air pollution	1.) Environmental liability 2.)Private energy production	1.) Tradable emission permits 2.)Auction able permits for ODS	Joint implementation on carbon offsets	
Water pollution	Environmental liability	Tradable wastewater discharge permits		Industry wide approach of Detergent free washing powder
Solid waste	Environmental liability		Tradable recycled contents	
Hazardous waste/toxic chemicals	Environmental liability	Tradable permits/rights	International offset systems	

2.3 Implementation and efficiency criteria

The list discussed in Section 2.2 only serves as example explaining the variety between the different types of economic instruments (EIs). Considering the big variety of EIs it is not surprising that the process of selecting the most effective EIs for addressing specific environmental problems is not an easy task. Governments everywhere in the world developed strategies to tackle environmental problems with the general aim of improving the quality of the environment.

Political interventions aiming to correct policy and/or market failures can lead to an improvement in environmental quality and to a greater economic efficiency. As discussed above quite different possibilities for intervention to correct these failures exist. What all of them have in common is that they can be effective only when environmental policy objectives are clearly identified at the beginning of the policy making process. After identifying the environmental policy objectives governments should assess the rationale for getting involved, i.e. why is there a need for government interventions for achieving some predetermined targets. Governments should further evaluate the costs and benefits of interventions. As briefly mentioned above, the selection process of the most appropriate EIs must be done in the context of the prevailing administrative and institutional framework. Finally, the selected economic instruments have to be implemented, while measures and mechanisms should simultaneously be put in place to evaluate and monitor the progress made in achieving the policy objectives. This last step allows quick action if it becomes necessary to adjust and revise the instruments.

This process of determining necessary steps undertaken by governments for intervening into markets aiming to improve environmental quality does not specify the details about the EIs should actually look like, i.e. the exact design of the EIs has to be developed in a further process. For example, the actual tax design depends on other factors and in particular on the function it should serve, whether to be a incentive tax or a revenue-raising tax.

As part of the process of selecting the suitable EIs for tackling individual environmental problems, questions relating to the actual design and measures to assess and evaluate the EIs should be addressed. The latter point of assessing the efficiency of instruments is of great importance but rarely done in practice. The following criteria can be seen as a guidance for undertaking such an analysis. The list is certainly not complete but covers the main issues:

cost-efficiency of the instrument: e.g. if there are large differences in abatement costs between polluters, there may be considerable cost savings in all economic instruments over regulatory measures;
capacity of the instrument to achieve the environment objectives: e.g. permits perform better since the number of permits is set equal to the emissions target. Taxes have higher risk of underachieving, especially if the tax level is set too low so that polluters prefer to pay the tax rather than change use or emission behaviour;
dynamic efficiency: e.g. instruments can encourage innovation in production processes that cut resource use and emissions as well as save money;

complex environmental criteria / difficulty in monitoring: e.g. when environmental processes are complex and emissions are hard to monitor, more blunt instruments like input or output taxes will have to be preferred;
vested interests and concern for distributional issues: e.g. although this depends on the socio-economic, political and cultural characteristics of each country, on the whole taxes are more difficult to ensure political acceptability for than targeted subsidies. This is not to say that instruments that will not have initial political support should be discarded. It is rather a point about designing and presenting new instruments in a way that takes potential political difficulties into account;
the numbers of agents (users or polluters): e.g. if there is a very small number of polluters or resource users, voluntary approaches may be better to implement, while tradable permits work best if there is a intermediate (not too many and not too few) number of users or polluters;
rent seeking or strategic behaviour induced by the instrument: e.g. subsidies, no matter how carefully targeted, are likely to encourage strategic behaviour while tradable permits may be used as a barrier to entry into a sector; and
requirements for institutional framework for successful implementation: e.g. a functioning institutional framework does not only cover formal rules but also 'informal constraints on human behavior, such as conventions and norms' (Söderholm 1999).

Many of the above criteria can also be found in the list developed by the OECD for assessing the effectiveness of taxes and charges (see Box 1; OECD 2001, pp. 45).

Box 1 The OECD evaluation criteria

• The environmental effectiveness of a tax can be measured as the extent to which the tax delivers its environmental objectives. The quantitative emissions reduction effect of a tax depends on the response of the polluter to the price incentive.

• Economic efficiency has two aspects. Environmentally related taxes exploit the different opportunities for abatement within a sector, and within an economy, by creating incentives for those firms, or sectors, with the lowest abatement costs to undertake most abatement of the polluting activity, resulting in an efficient cost-minimising pattern of abatement activity. A measure of economic efficiency is therefore the extent to which there is a tendency to equalise abatement costs across pollution sources.

• It would also be useful to have a measure of dynamic efficiency. Environmentally related taxation creates incentives for firms to develop new technologies and techniques that might abate more cheaply, therefore a possible test is to appraise the type and cost of abatement before and after a tax is levied.

• It is important to design environmentally related taxes to achieve environmental and revenue objectives whilst minimising the administrative costs of operating the tax. Many environmentally related taxes are added to, or modify, existing taxation in order to reduce administrative costs. However, many taxes, such as on that carbon/energy have multiple exemptions and rebates, including rebates linked to negotiated agreements, that may be costly to administer. Administrative costs could be compared to other taxation, for example VAT and to total revenues collected.

• A potential advantage of some environmentally related taxes compared to command and control approaches, is a reduction in compliance costs for business or households. Industry can decide how to respond to a tax, whereas with regulation this flexibility is limited. Compliance costs include any extra costs of operating less polluting production technology, and the administrative costs of measuring and verifying compliance. Households may also incur additional expense and loss of utility due to changing consumption patterns.

• The revenues raised by a tax on emissions, activity, or product depend on the behavioural response of the taxpayers to the charge. Revenues are not a good indicator of the environmental effectiveness of a tax. If producers respond to a tax by reducing output and/or investing in abatement activities then the taxable item (the emissions) will reduce, as will revenues. If the price elasticity of the taxed product or activity is low (in absolute value), an increased tax rate could cause revenues to increase.

• Environmentally related taxation will also impact more generally on the economy and on producer and consumer behaviour. It is difficult to disentangle and quantify these "soft" effects that may include changes in the general price level, technology mix, employment, international trade, and income distribution and changes in producer or consumer attitudes and awareness of environmental issues. Where possible qualitative information on these effects could be given.

A sometimes hotly debated theme in the economic literature is the question whether EIs should be used extensively in developing countries and countries in transition to a market economy. One of arguments for implementing econo mic instruments in these countries is as Bell notes that '*some advisors flatly promised that economic instruments would have lower institutional and human resource requirements than command and control* (Bell 2002, p. 10)'. However, Bell questions this argument as '*a glittering and ultimately incorrect promise in countries with small and underfunded environment ministries* (Bell 2002, p.10)'.

Other constraints impairing the effectiveness of economic instruments for environmental policy, especially of environmental taxes and charges, in economies in transition are discussed by Söderholm (1999) in detail. He identifies the lack of functioning markets and no viable economic and social institutions are factors accountable for this situation. Furthermore, a rathe r lax monitoring and enforcing environmental compliance is another a factor obstructing the overall good experience gained with EIs in reducing environmental pollution. This is why Chapter 3 not only provides a review of EIs in use in the Black Sea countries but also discuses the institutional frameworks which are in place in the different countries.

Annex to Chapter 2

List of Criteria used by ECOTEC et al. to evaluate Environmental Taxes and Charges (reference: ECOTEC et al 2001). This list serves illus trative purposes; i.e. it raises questions to be answered when the effectiveness of EIs are assessed.

Tax Design

Current Level (past and future profiles)
What is the point of application of the tax?
Was there an externality evaluation supporting the design of the tax?
Was there an *ex ante* assessment carried out?

Process Development of the Tax
Date of 'first discussion'
Date of first implementation
Date of changes in the tax system

Organisations Roles
Who designed the tax?
Who is responsible for the implementation/administration (tax collection)?
Who decides whether there are any exemptions?
What has been the development of exemptions over time?
Percentage of tax collection in cash

Intentionality of Tax
Was the tax initially aimed to
have a significant incentive effect for the natural resource management?
primarily to raise revenue for particular environmental activities (and thus have indirect environmental effect);
simply raise revenue for the exchequer.

Portfolio of Policy Instruments – Complementarity and Substitutability of Taxes with other Instruments
Have the taxes been implemented on their own, or part of whole package of instruments (describe)?
Have the taxes substituted for another instrument?
Has the discussion of taxes led to the implementation of alternative instruments to taxes (e.g. voluntary agreements)?
Is there a developing relationship with other instruments in the policy instrument portfolio?

Effect and Effectiveness of the Tax
Was the tax designed to have an incentive effect?
Are there any cases of 'win-win' effects (environment and efficiency)?
Have there been any other effects of the tax - technology or technique innovation etc.?
Have there been an perverse incentives (evasion etc)?

Effect on Producers
What are the key sectors affected?
What are the price effects at the different stages of the value chain?
What is the level of tax as a percentage of the cost of production and / or sales price
To what extent are the price increases passed on through the value chain?

Effect on Consumers
Which consumers are affected?
What is the tax/level share of price?

Have any concerns been raised by consumers of the affect of the tax/levy, and if so what are they and which are important?

Equity and Distributional effects

Are there significa nt differences of tax burden across different sectors of the economy?
Are there significant differences of tax burden across different household (income) groups?
Is there quantitative evidence for significant regional (geographical) effects?
What are these differences, and are there any specifically disadvantaged groups?
Is there quantitative evidence for significant distributional effects?
Are there measures in place to compensate for distributional effects, and what are these?
If only qualitative data is available are the distributional effects of significance?

Trade and Competition Issues

Have concerns been raised regarding adverse affects on competition, and what have these been?
What evidence is there of adverse affects on competition?
Who have been the winners and losers? (link to price effects)
Have there been any trade implications, and what has been the effect? (link to competition)

Revenue

What revenue has been raised? (year by year profile)
Who determines the use of revenues? Are these revenue s earmarked or not (i.e. is there hypothecation)?
What is the mechanism for revenue recycling?
What are the revenues used for (activities, sectors, tax shifts)?
Does the use of the revenues lead to any likely positive environmental effects?
What is the le vel of revenue as a percentage of GDP, and as a percentage of sector turnover?

Employment

Have any concerns been raised on the employment impacts of the environmental tax/charge?
Is there any evidence for this concern?
Is there any indication /estimationof positive effects of taxes/charges on employment?
Are there any cases of win-win effects (environment benefit and employment gains)?

Administrative and Compliance Cost

Who is managing the tax at the level of government?
Is there an administrative burden and what constitutes this burden?
Is there a cost estimate for this burden?
If only qualitative evidence is available, would it be fair to say that the administrative burden is (a) large (b) medium (c) small (d) insignificant.

3. OVERVIEW OF CURRENT EXPERIENCE WITH ECONOMIC INSTRUMENTS

After having discussed the underlying rationale for implementing economic instruments for environmental policy and the different types of them in a rather general and theoretical way, this Chapter reviews EIs which are currently in place in the Black Sea countries. This review is a component of the overall task of Black Sea Ecosystem Recovery Project (BSERP) aiming to identify, assess policies that improve the water quality in the Black Sea including nutrient and hazardous pollution reduction.

A caveat has to be made at the beginning of this section because the focus is directed to reviewing economic instruments aiming to generate sustainable solutions to the pollution problem in the Black Sea, i.e. *'to maintain (or reduce) nutrients (and hazardousness substances) to 1997 levels'* (Parr and Reynolds XXXX, p.12). This means that only those EIs which are addressing this pollution problem are studied.

The priority sectors in this context are agriculture, industry and households as identified by Parr and Reynolds (XXXX, pp. 12) requiring that both point and non-point (or stationary and diffuse) sources of pollution will have to be considered. These two distinct types of pollution sources are crucial not only in estimating the pollution burden but they also require different policy approaches and economic instruments dealing with the pollution they generate.

Sections 3.1 – 3.6 presents a format for the summary of the National Review Reports. The information currently contained in these sections will be checked and updated. Within each of these subsections, the following structure is anticipated for the sections households, industry and agriculture:

history of EIs in the sector;
description (similar to the information you already have here);
advantages / achievements (what and why) of the EIs;
disadvantages / failures (what and why) of the EIs;
Future changes (planned to be discarded / remain as is / expanded, changed);
Priorities for future for the sector in general.

Table 2.1 above provides a generic list of EIs, i.e. a list of economic instruments addressing environmental policy objectives in different environmental themes. However considering the priority environmental problems and economic sectors covered by this study, it is not surprising that the national reviews will contain a shorter list of EIs focusing on environmental problems associated with water.

3.1 Bulgaria

3.1.1 Overview

Background information concerning water management policy and EIs can be found in EC 2000b, Öko 2001, Speck et al. 2001a and 2001b.

A new water law is in place since January 28,2000 – introduction of the principle of full cost recovery (higher tariffs are expected to meet infrastructure costs without any subsidies).

Short overview of EIs used in Bulgaria

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User charges for water supply	Yes	yes	Yes		EC 2000, Speck et al. 2001, Öko 2001.
User charges for wastewater services	yes	yes	Yes	Included in water consumption charge	EC 2000, Speck et al. 2001, Öko 2001.
Water abstraction tax	Yes	yes (since Jan. 2001)	yes		EC 2000
Effluent tax / charges	No	no	no		
Non-compliance fee – effluent tax / charge		yes		Applicable for direct discharges	EC 2000
Water abstraction permits and effluent licenses				No trade with permits is envisaged	EC 2000
VAT		yes	yes	20% for user fess paid by hh and industry	EC 2000
Subsidies	Yes	yes	yes	No full cost recovery – investment costs are not covered by water pricing	EC 2000
Tax on pesticides, etc (agricultural inputs)	No	no			Speck et al 2001
Voluntary approaches: Eco-labelling of products				No legislation in place	Parr and Reynolds

3.1.2 Households

Household tariff structure – volumetric uniform charge.

EC 2000: Household water pricing in 2000 (exchange rate 1.956 BGL/EUR)

Drinking water price:	0.7 BGL/m3	(0.36 EUR/m3)
Watewater price:	0.13 BGL/m3	(0.07 EUR/m3)
Total:	0.83 BGL/m3	(0.43 EUR/m3)

3.1.3 Industry

EC 2000: drinking water 0.43 – 0.45 EUR/m3 and sewerage 0.04 EUR/m3
plus treated wastewater: rates are depending on the concentration of O2/l BOD5 and have been between 0.18 – 0.31 EUR/m3

Total tariff: between 0.65 and 0.8 EUR/m3

EC 2000: No price difference between industrial waters (untreated water for industrial uses) and drinking water used by industry.

3.1.4 Agriculture

Pollution by fertilisers and pesticides has dramatically decreased – particularly during transition phase. For example, the 1997 level of total artificial fertilisers was 16 percent of the 1981 level.
Also, 185.8 kg of ammonium per 100 hectares was used in 1985, which was reduced by 1994 to 61.8 kg per 100 hectares.

Annual Application Rates for Artificial Fertilisers in kg/ha

Year	Nitrogen	Phosphates (P2O5)	Potassium (K2O)	Total
1981	109.94	90.16	26.84	226.98
1995	27.6	2.68	0.03	30.69
1996	32.36	2.76	0.03	35.61
1997	38.77	3.63	0.4	42.76
1997 level as % of 1981 level	30	3.5	0.6	16

Source: Öko 2001.

Agricultural water pricing: 0.011 – 0.091 EUR/m3 (at the end of the 1990s) (Öko 2001).

3.1.5 Other econo mic sectors (if relevant)

Bulgaria – environmental fund exist; revenues from the water pollution non-compliance fee are allocated to the environmental fund (Speck et al 2001 – funds),

3.2 Georgia

3.2.1 Overview

Background information concerning water mana gement policy and EIs can be found in EC 2002 and 2003, OECD 1999a, 1999c, 2000a, 2003a, 2003b.

OECD 2000a –key environmental issues relevant for this project:

Low quality of water supplies due to inadequate treatment and inadequate wastewater discharges
Insufficient treatment of wastewater (EC 2002: Water supply and sewage companies are responsible for more than 90% of the BOD discharge. The main point surface of pollution to the surface water is the municipal wastewater sector).
Georgia is a contributor to the heavy pollution of the Black Sea – among the major Georgian emission sources are discharges from shipping, municipal waste water,

agricultural runoff, effluents from industry in the coastal zone, and waste dumped in the sea or on the beaches.

Short overview of EIs used in Georgia

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User charge for water supply	Yes	Yes	Yes	Charges are cover a minor share of the costs of services	OECD 2000a
User charge for wastewater services	Yes	Yes	Yes	Charges are cover a minor share of the costs of services	OECD 2000a
Water abstraction tax	Yes (but too low and therefore exempt)	Yes	Yes	In effect since 1994 (groundwater) and 1998 (surface water) The rate is an ad-valorem tax: surface water: 3-10% of market price[48]; groundwater 2-8% of market price	OECD 2000a; OECD 2003a; EC 2002 and 2003
Effluent tax / charges		yes	Yes	In effect since 1993	OECD 2000a; EC 2002
Non-compliance fee – effluent tax / charge Water abstraction permits and effluent licenses		yes	Yes	Liability/fines	Parr and Reynolds, OECD 2000a; EC 2002
VAT			yes	User charges are subject to VAT	
Subsidies Tax on pesticides, etc (agricultural inputs)	No	No			
Voluntary approaches		yes		Only labelling	Parr and Reynolds
Tax on land	yes			Tax depends on	OECD

				the quality and location of the land	(Georgia)

Taxes and charges in Georgia – emphasis on their revenue-raising function and not based on incentive function
Evaluation of the system in 1999 (OECD 2000a): system of pollution taxes and charges is too complex to administer; up to 350 pollutants are subject to the pollution charge.

Lack of monitoring

Collection rate of revenue of taxes is weak – what is rate of collection efficiency?

EC 2002: none of the wastewater treatment facilities are able to provide biological treatment

3.2.2 Households
OECD 2003b (Figure 1.2 page 53) – water tariffs for supply and wastewater services in 2001

Georgia: 0.067 USD/m3

Tariff for water supply service:
Residential customer (households): 0.053 USD/m3

Tariff for wastewater service:
Residential customer (households): 0.014 USD/m3

3.2.3 Industry
OECD 2003b: Tariff for water supply service (2001):
Other customers (industry) 0.203 USD/m3

Tariff for wastewater service:
Other customers (industry) 0.072 USD/m3
Total: 0.275 USD/m3

3.2.4 Agriculture
3.2.5 Other economic sectors (if relevant)

OECD 2000a – attempts to establish an environmental fund but without success
Revenues from environmental taxes and charges go to regional budgets – use of these revenues is not earmarked for environmental investments,

3.3 Romania
3.3.1 Overview
Background information concerning water management policy and EIs can be found in EC 2000b, Öko 2001, Speck et al 2001a and 2001b,

Short overview of EIs used in Romania

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User charge	yes	yes	yes		EC 2000b, Speck et al 2001a
User charge	yes	yes	yes		EC 2000b, Speck et al 2001a
Water abstraction tax	yes	yes	yes	Differentiated between type of water body and usage:	EC 2000b, Speck et al 2001a
Effluent tax / charges		yes	Yes		EC 2000b, Speck et al 2001a
Non-compliance fee – effluent tax / charge		yes	yes		EC 2000b, Speck et al 2001a
Water abstraction permits and effluent licenses				No trade between licenses currently	EC 2000b
VAT			yes	On user charges 18%	
Subsidies					
Tax on pesticides, etc (agricultural inputs)	no	no		Proposed by Government	EC 2000b
Voluntary approaches: Eco-labelling of products				Phosphorous free detergents – under discussion	Parr and Reynolds

EC 2000: hidden and cross subsidies are in place

EC 2000: raw water price (water abstraction fee) covers O&M costs – no capital costs (covered by government appropriations)

3.3.2 Households

EC 2000: charging structure is based on volumetric rates

Households which are not metered – charges are based on number of residents in each unit

Speck et al 2001a: average tariff for 2000: exchange rate 19,947 ROL/m3

drinking water	2,100 ROL/m3	0.11 EUR/m3
sewage	300 ROL/m3	0.02 EUR/m3
total	2,400 ROL/m3	0.13 EUR/m3

3.3.3 Industry

Speck et al 2001a: average tariff for 2000: exchange rate 19,947 ROL/m3

drinking water	550 ROL/m3	0.03 EUR/m3
sewage	300 ROL/m3	0.02 EUR/m3
total	2,400 ROL/m3	0.05 EUR/m3

3.3.4 Agriculture

Öko 2001 and EC 2000b: Industry pays the highest price for raw water (abstraction tax) – then agriculture and the lowest price is paid by households.

Öko 2001: The main polluters in agriculture have been large animal husbandry units, crop and fruit-tree farms, mechanic al companies, and agricultural land and forest owners, regardless of their ownership type.

Some agricultural products are tax exempt or a lower VAT rate is levied on products.

3.3.5 Other economic sectors (if relevant)

The establishment of an environmental fund is under discussion (Speck et al 2001a).

3.4 The Russian Federation

3.4.1 Overview

Background information concerning water management policy and EIs can be found in OECD 2000b, 2003a and 2003b, Speck and Martusevich 2003,

Short overview of EIs used in Russia

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User charge for water supply	Yes	yes	Yes		OECD 2003a, 2003b
User charge for wastewater	yes	Yes	yes		OECD 2003a, 2003b
Water abstraction tax		yes	Yes	Irrigation is tax-exempt	OECD 2000b
Effluent tax / charges	yes	yes	Yes		Speck and Martusevich (2003)
Non-compliance fee – effluent tax / charge	yes	Yes	yes		Speck and Martusevich (2003)
Water abstraction permits and effluent licenses	(agr. exempt)	yes	yes	SW: 2-12.7 USD/1000m3 GW: 2-12.7 USD/1000m3	OECD 2003 and OECD 2003-EAP
VAT			yes	user charge	
Subsidies					
Tax on pesticides, etc (agricultural inputs)	no	No			

Economic incentives				Tax incentives for environmentally friendly process technologies and products	Parr and Reynolds
Tax on discharges of wastewater				Tax is not related to pollution load but on the assimilative capacity of water bodies!	OECD 2003
Environmentally liability					OECD 2003 - EAP

3.4.2 Households

OECD 2003b (Figure 1.2 page 53) – water tariffs for supply and wastewater services in 2001
Russia: 0.193 USD/m3

Tariff for water supply service:
Residential customer (households): 0.108 USD/m3
Tariff for wastewater service:
Residential customer (households): 0.084 USD/m3
Total 0.192 USD/m3

3.4.3 Industry

Industrial users cross-subsidise private households.

OECD 2003b: Tariff for water supply service (2001):
Other customers (industry) 0.219 USD/m3
Tariff for wastewater service:
Other customers (industry) 0.175 USD/m3
Total: 0.394 USD/m3

3.4.4 Agriculture

3.4.5 Other economic sectors (if relevant)

OECD 2003b, p.95: Unlike Ukraine, tariffs for Russian budgetary organisations are supposed to be set at the same level as their residential counterparts in most cases. The State Committee for Construction reported in 2001 that **cross-subsidies** for water services did not exceed two times. At the same time, according to the 2001 survey of 90 water utilities, tariffs for water/wastewater services for other customers were 3.6 times as high as tariffs for households and budgetary organisations. The survey also revealed a trend towards reducing **cross-subsidies**. **Cross-subsidies** are expected to be phased out in Russia by 2004.

Environmental funds exist in Russia – however, the national fund was abolished; regional funds still exist.

3.5 Turkey

3.5.1 Overview

Background information concerning water management policy and EIs can be found in OECD 1999b

Short overview of EIs used in Turkey

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User fees (water consumption charge) User fees (sewage treatment charge)					
Water abstraction tax		Yes		There is no abstraction charge for agricultural water use but for other usages	
Effluent tax / charges		Yes	yes		
Non-compliance fee – effluent tax / charge					
Water abstraction permits and effluent licenses	yes				
VAT				15	
Subsidies Tax on pesticides, etc (agricultural inputs)					

OECD/EEA database on economic instruments:
The following instruments are listed:
Wastewater user charges – varies by municipalities
Charge on water pollution
Support for treatment facilities
Charge on fisheries

3.5.2 Households

3.5.3 Industry

3.5.4 Agriculture

OECD 1999b, p.15: Turkey: 77 per cent of water is used in agriculture (OECD

3.5.5 Other economic sectors (if relevant)

Environmental fund existed but abolished in 2002.

3.6 Ukraine

3.6.1 Overview

Background information concerning water management policy and EIs can be found in OECD 2000c, 2003a and 2003b,

Key environmental issues (OECD 2000c) – relevant for this project:

Environmental rehabilitation of the freshwater reserves and improvement of drinking water quality

New construction and reconstruction of municipal and industrial sewage treatment plants
Protection the Black Sea and the Sea of Azov against pollution and further improving their environmental state

Short overview of EIs used in Ukraine

Economic instrument	Agri.	Ind.	Hhold	Comments	Reference
User charges for water supply	yes	yes	Yes		OECD 2000c and OECD 2003a/b
User charges for wastewater services	yes	yes	yes		OECD 2000c and OECD 2003a/b
Water abstraction tax	Yes (reduced rate of 20% - until 2001)	yes	yes	Water resource tax – rate is differentiated between water bodies and usage SW: 3.8-22.5 USD/1000m3 GW: 7.5-23.5 USD/1000m3	OECD 2000c OECD 2003 a/b
Effluent tax / charges		yes	yes		OECD 2000c
Non-compliance fee – effluent tax / charge		yes	yes		OECD 2000c
Water abstraction permits and effluent licenses	yes	yes	Yes	Trade in discharge quotas are under discussion	OECD 2000c
VAT			yes	Levied on user charges	
Subsidies					
Tax on pesticides, etc (agricultural inputs)	no	No			
Land tax	yes			Rate depends on quality and location of the land	OECD-Ukraine

OECD 2000c/2003a: Effluent tax/charge - Ukraine has reduced the number of chargeable pollutants – instead of 27 only 10 water pollutants are subject to effluent charges (compared to Russia with 197 water pollutants and Georgia with 142)

3.6.2 Households

OECD 2003b (Figure 1.2 page 53)– water tariffs for supply and wastewater services in 2001
Ukraine: 0.158 USD/m3

Tariff for water supply service:
Residential customer (households): 0.095 USD/m3

Tariff for wastewater service:
Residential customer (households): 0.063 USD/m3

3.6.3 Industry

OECD 2003b Tariff for water supply service (2001):
Other customers (industry) 0.257 USD/m3
Tariff for wastewater service:
Other customers (industry) 0.160 USD/m3
Total: 0.412 USD/m3

3.6.4 Agriculture

3.6.5 Other economic sectors (if relevant)

OECD 2003b, p. 90: On the whole, Ukrainian water and wastewater enterprises received UAH 430 million in budget funds (0.89% of the total consolidated budget expenditures) in 2000 and UAH 158.3 million in 2001 (0.29%). Government support of the Ukrainian water and wastewater sector was reduced significantly.

OECD 2003b, p. 94 re: **cross-subsidisation**:
In **Ukraine,** the highest tariffs, as a rule, are set for industrial and commercial enterprises, somewhat lower tariffs are set for institutions and organisations funded from state and local budgets (e.g. schools, hospitals, etc.), and the lowest tariffs are set for residential consumers. In 2001, average Ukrainian water and wastewater tariffs for residential customers were 2.5 to 2.7 times as low as the tariffs for industrial and commercial customers and two times lower than for budgetary organisations

Environmental funds exist on the national, regional and local level (OECD 2000c); revenues from pollution charges are allocated to these funds.

3.7 Summary of the use of economic instruments in Black Sea countries

Comparison – can only be done after data and information compilation has been carried out by local experts

Some of the items to be discussed / summarised
which economic instruments are being used / implemented in the countries;
the institutional framework / set-up – what are the differences between the countries;
the regulatory setting (discussion closely connected to economic instruments; i.e. self-monitoring vs monitoring by governmental organisation, collection efficiency of revenues, tax waivers / exemptions, enforcement, etc.)
physical infrastructure with regard to wastewater treatment facilities

importance of the agricultural sector (how important is the agricultural sector in terms of contribution to GDP/labour force in the individual countries, including information about the use of pesticides and fertilisers in the different countries)
findings concerning the effectiveness of economic instruments: the economic instruments are not effective because of may reasons (result of different studies, i.e. mainly based on Speck and Martusevich 2003 and OECD 2003a):
user charges are too low
cross-subsidies between different users (industry, agriculture, households)
effluent tax/charge rates are too low – they do not fulfil the function of revenue-raising nor do they provide any incentive function, i.e. reduction in environmental pollution
the system of pollution charges is too complex (particular in Russia and in Georgia): too many pollutants are subject to pollution charge and too many polluters have to pay the EIs
system of monitoring and administering is not effective; i.e. lack of enforcement
institutional obstacles exist at the regulatory level

See National Review Report Outline provided separately.

Proposed tables for this chapter:

Table 3.7.1: Overview of environment taxes and charges in the water sector				
Country	Water abstraction tax	Water effluent tax / pollution charges	User charges for water	User charges for sewage
Bulgaria	No	NCF	Yes	Yes
Georgia	Yes	Yes / NCF	Yes	Yes
Romania	Yes	Yes / NCF	Yes	Yes
Russian Federation	Yes	Yes / NCF	Yes	Yes
Turkey				
Ukraine	Yes	Yes / NCF	Yes	Yes

Notes: NCF- non compliance fee (charges on pollution in excess of established limits)

Table 3.7.2: User charges (in USD or EUR/m3) – table has to be checked and updated									
	User charges for water supply service			User charges for wastewater services			Total – user charges		
Country - reporting year and currency	Households	Industry	Agriculture	Households	Industry	Agriculture	Households	Industry	Agriculture
Bulgaria (2000) (in USD / EUR[49])	0.36	0.43/0.45		0.07	0.04		0.43	0.65/0.5	
Georgia (2001) (in USD)	0.053	0.203		0.014	0.072		0.067	0.275	
Romania (2000) (in EUR)	0.11	0.03		0.02	0.02		0.13	0.05	
Russian Federation (2001) (in USD)	0.108	0.219		0.084	0.175		0.192	0.394	
Turkey									
Ukraine (2001) (in USD)	0.095	0.257		0.063	0.160		0.158	0.412	

3.8 International experience with economic instruments

The rationale for this chapter is to reveal international experiences with regard to the use of economic instruments for environmental policy, in particular, with respect to the water quality problems in the Black Sea.

3.8.1 Water pricing – user charges for water supply services and wastewater services

Differences in user charges for water services are not only a phenomenon in the Black Sea countries but also in OECD countries as discussed in the box below (OECD 2003c):

Box 1.1. How Much Does a Cubic Meter of Water Cost in OECD Countries?

Despite rapid growth of tariffs for water/wastewater services in former Soviet republics over the last decade, they are still much lower than the cost of 1 m^3 of water in OECD countries. As statistics show, residential tariffs are characterised by differentiation across countries ranging from \$0.60 per m^3 in Italy to \$5.10 per m^3 in Norway. Therefore, the highest cost exceeds the lowest by almost nine times. In addition to Italy, water services are relatively low (by OECD standards) in Canada (\$0.77), Greece (\$0.84), Spain (\$0.89) and such post-communist countries as Czech Republic (\$0.99 per m^3). The cost of 1 m^3 of water slightly exceeds one dollar in Hungary and Poland (\$1.09), whereas residents of Sweden, Netherlands and Germany have to pay almost three times as much (\$2.86 to \$3.47).

Source: Social Issues in Provision and Pricing of Water Services, OECD, 2003.

3.8.2 Water supply[50]

Groundwater Tax in the Netherlands

In 1994, the Dutch government introduced a groundwater tax at the national level. A similar tax at the regional level had already existed since 1983. The purpose of the tax is manifold: it aims to raise revenue, but it is also intended to curb the use of groundwater and stimulate the use of surface water. Groundwater is responsible for 70 per cent of the total water supply in The Netherlands. Tax rates are differentiated between water uses, i.e. the agricultural sector receives a 50% tax rebate meaning that the rate is 0.08 EUR/m3 as compared to the general tax rate of 0.15 EUR/m3 which has to be paid by water works for water used for other purposes (i.e. drinking water). . The water companies themselves monitor the volume of water abstraction and all economic sectors (household, industry and agriculture) are affected by the tax.

Indications are that the tax did indeed reduce the use of groundwater by up to 12 per cent. The tax did raise the cost of water use by a significant percentage, of the order 40% for industries supplied by water works, and in some exceptional cases of industries with self-extraction of groundwater the tax occasionally led to an increase of more than 100 per cent. The groundwater tax resulted in a 27 per cent increase in the average water tariff for supplying drinking waters. However, total tax revenues generated by the groundwater tax amount to only 0.03 per cent of turnover of Dutch industry. So, although the increases in costs of water use

were significant in many cases, in terms of overall costs to industry, the changes were deemed insignificant (ECOTEC, 2001).

Water Supply Tax in Denmark

The introduction of the water supply tax was part of a greater tax shifting programme (i.e. ecological tax reform) in Denmark in the 1990s. The aim of this tax was to raise revenues to reduce income tax and to increase the efficiency of water utilisation.

The tax was gradually introduced in 1994 and the final tax rate of 5 DKK/m3 (0.7 EUR/m3) was reached in 1998[51]. Only households and the service sector are subject to this tax. Industry and agriculture have been effectively exempted from the tax. This final rate corresponded to around 15-20% of the average water price (including sewage fees)(Ministry of Environment and Energy, DEPA, 2000). This tax has been introduced with rather low administrative cost since virtually all households were metered already, and as of January 1999, metering became compulsory.

The main purpose of the tax was to make consumers pay for the natural resource, water, and thereby act as an incentive to reduce water consumption. A secondary purpose was to affect a decrease in the amount of sewage discharged, this being closely associated with the targeted reduction in water consumption. A further aim of the tax was to increase the performance of the water companies by minimising the leakage rate of water pipes.[52]

Water consumption in Denmark did decline significantly since the introduction of the tax, and even the pipe leakage rate declined by 10 million m^3. The Danish tax has too many exemptions to promote resource use efficiency across the economy, but has induced additional water savings estimated at about 13 per cent of residential use between 1994 and1999.

Tradable water rights in Chile

An interesting example of the application of another type of economic instrument is based on the Chilean Water Code of 1981. This code established tradable water rights allocating water to different user. Water rights in Chile are private assets, held separately from land ownership, and these rights can be traded independently from trade in land. The provision of water and sanitation services is through concessions. The government grants a service provider the concession to provide water and sanitation services.

Tariffs are calculated at the marginal cost of the service provision. This has implied a drastic increase in the price of water and sanitation services over the four year period during which the system has been phased in. There is no explicit tax levied on water supply or the provision of sanitation, but this system implied the removal of all subsidies from the sector.

3.8.3 Water pollution[53]

The Dutch wastewater scheme

The Netherlands has a waste water charge system which applies to the direct and indirect discharges of organic material, nitrogen, mercury, cadmium, copper, zinc, lead, nickel, chromium and arsenic into surface water bodies. There are effectively two different levy systems for state and non-state waters. The former is regulated at the national level, and the latter at the regional, provincial level and both schemes have been in place since the early 1970s.

The tax covers the costs of sewage treatment and resembles therefore an ordinary user fee. However, in two important respects, it deviates from the cost recovery charge. The scheme does not cover the costs of the sewer network, which is financed by a separate municipal fee. The tax applies also to direct dischargers, i.e. industries and municipal treatment plants which discharge to surface waters. The tax base is not the volume of water discharged but the quantity of the actual pollutant discharged. The system is mainly based on a self-assessment and monitoring, but is subject to sample control from the relevant authorities.

The regional water boards is the responsible authority for collecting the taxes for discharges to regional water courses and their regional sewage treatment plants where as the government collects the taxes based on the effluent discharged into state water.

Revenue from both taxes (state and non –state waters) was earmarked for water quality management tasks, including infrastructure investment in sewage treatment but also for covering administrative costs such as permit awards and monitoring. However, this subsidy scheme of providing financial resources for new investments expired at the end of 1996.

Another interesting aspect of the scheme was that some of the tax revenues were used to assist industries which were identified as most likely to be most affected by the tax. The Dutch Water Research Institute, RIZA, offered financial support to affected industries, such as pulp and paper industry. Through close, concerted collaboration among public sewage specialists and relevant experts from relevant private enterprises, it was possible to identify cost-effective technological alternatives to conventional end-of-pipe measures.

According to the indicative multi-annual programme 1975-79 it was possible for the paper industry to reduce emissions from 1.5 million inhabitant equivalent (i.e.) to 0.1-0.2 million i.e. by a combination of cleaner technology and sewage treatment. For the sugar industry emissions were reduced from 2.5 million i.e. to 0.005 million i.e. mainly by extensive recirculation of water.

The tax was remarkably effective with a significant reduction in discharges since its introduction. The net load on surface waters from discharges has been reduced from 45 million inhabitant equivalents in 1970 to 4.6 million inhabitant equivalents in 1996, though clearly, not all of this reduction can be attributed to the tax. The total revenue from the tax amounted to 0.3 per cent of the sales value or 1 per cent of value added of all Dutch industry in 1996. Initially, though, there was quite resistance from consumers who did not see themselves as polluters, but it is now generally accepted.

The German wastewater tax

In Germany wastewater tax affects both direct and indirect dischargers to water. A direct discharge fee is applicable to the 8,000 municipalities and 4,000 industries which discharge waste water directly into a water course. This direct discharge fee is payable per unit of damage unit calculated as either one of 50 kg of chemical oxygen demand (COD), 25 kg of nitrogen, 3 kg of phosphorus etc. and interacts with the standards for sewage discharge in a very complex way. The tax is reduced if the discharger adheres to the standards and is even further reduced if the discharger performs better than the set standards.

Indirect discharges to a sewage plant are covered by the normal waste water user fee. Since the treatment plant itself is subject to the wastewater discharge tax on direct dischargers, the charge would be expected to be reflected in the user fee for wastewater services paid by those to whom the service is provided.

The tax collected is distributed to the Länder authorities which have jurisdiction over water management and the right to collect the taxes. The Länder are also responsible for the monitoring and administration of the system. There is significant evidence that the tax improved and reinforced compliance since many companies found it cheaper to improve on water use in the production process than to introduce or extend sewage treatment. In that sense the tax was very effective since its intention was not to raise revenue, but to encourage compliance and to do even better than the standards. The emphasis on compliance also implied that sewage treatment plants and industries invested in advanced treatment facilities.

It is certainly of great interest in the context of analysing water pollution in the Black Sea to highlight some of the debates concerning the success or failure of the German effluent charge. First of all it has to be said that: *'it was never meant to reduce to a minimum the total cost of pollution abatement, it was never meant to achieve allocative efficiency. From the beginning, it was aimed at strengthening the implementation and enforcement of water legislation by enabling (or forcing) the competent authorities to establish effective monitoring'*[54].

Important aspects of achieving such an aim are certainly to raise the public awareness regarding water policy issues and to *'consider capacity building as a separate function of economic instruments. … Capacity building can be beneficial on the side of the authorities responsible for enforcing environmental legislation, as well as on the side of polluters'*[55]. From the perspective of the administration, such an economic instrument can be seen as a policy tool for enforcing and strengthening direct regulation.

Because of the fact that the instrument was used partly to support the development of a well-functioning regulatory infrastructure there would appear to be lessons to be learned from the German approach.

Given the lack of regulatory capacity in many Black Sea countries at present, it would seem quite appropriate to adopt an approach in which the tax was intended to assist the development of regulatory capacity. At some stage, this has to be done anyway, and rather than trying to find a mechanism to encourage compliance in the absence of any institutional capacity to ensure that compliance is indeed achieved, it may be wise to design the charge to support the very regulatory capacity which is a pre-requisite for ensuring compliance with standards.

The Danish wastewater tax

The Danish authorities have introduced a mainly revenue raising waste water tax on direct discharges into water courses. The tax applies to biological oxygen demand (BOD) nitrogen and phosphorous at fixed rates per kilogram discharged. Though the main aim of the tax was revenue raising, it had the added incentive of compliance to a set of standards, and to improve the performance of waste water treatment processes. The tax accrues to the national fiscus, but as a compromise the Danish government devotes a substantial portion thereof to an

independent Water Fund (whose aim is the protection of ground water resources), which implies a degree of earmarking.

The Ministry of Taxation designed the tax, but the tax is collected by the customs and tax agency. Some of the main polluting companies have been exempted for competitiveness reasons, but overall the tax was very effective on those upon which it was levied, reducing the level of discharges by between 20 and 25 per cent.

It is worthwhile to note that in the same period, emissions from those industries exempted from the tax increased by between 15 and 20 percent, reducing the overall effectiveness greatly.

The South American and Australian experience[56]

Water pollution is characterised as one of the main environmental problems in South American countries, such as Brazil and Chile, and it is due to domestic effluents and industrial discharges. In the 1990s around 50 percent of domestic sewage was collected by the general sewerage system in Brazil. However, the treatment levels were rather low not exceeding 15 percent and it was estimated that investments of around 1 percent of Brazil's GDP would be required to offer adequate sanitation levels (Huber et al, 1998, p.46), a similar situation as it is the case in many CEE and EECCA countries.

Brazil and Chile implemented slightly different charging systems. Several Brazilian states implemented sewage tariffs based on pollution content, and industrial effluent charges are based on the content of organic matter as well as on suspended solids. Chile adopted another system: the charges for the provision of water services are based on marginal cost pricing and full cost recovery and additionally a surcharge of 7 percent on invested capital. Water charges for effluent discharges are set on the basis of recovery of financial costs (Huber et al, 1998, p31). This clearly meant that these charges do not correspond to the polluter pays principle because of the lack of inclusion of environmental and resource costs.

The World Bank report states that the failure of these schemes with regard to introducing pollution and usage criteria into the determination relates to the '*lack of appropriate design of the instrument, lack of information about impacts, incompatibility with the available monitoring system, and inadequate planning of its coverage*' (Huber et al, 1998, p31). Probably the most illuminating proof of the failure of these charges is on the revenue side. It was estimated that the potential revenue was about USD 90 million and actually only USD 116,000 were collected.

The structure of the water effluent charges implemented in the early 1990s in Australia is also interesting. The actual level of the effluent charge implemented in South Australia depends on a whole range of different criteria including a salinity factor and a pollutant factor (James, 1997). Of equal interest to the actual tariff setting procedure is the underlying strategy of increasing the charge rates gradually over time with the intention of establishing an incentive-based water effluent management system rather than a scheme designed simply to cover operating and monitoring costs. This scheme follows the approach discussed in the World Bank report above and is also closely linked to command-and-control regulations because all discharges have to be licensed in South Australia. Advanced announcement of future increases

in taxes and charges, as in this case, could lead to dynamic efficiency gains since polluters could invest in efficiency and pollution control now to avoid higher rates of tax in future.

3.8.4 Agricultural sector[57]

The use of pesticides and nitrogen emissions from agriculture cause environmental problems, including the eutrophication of surface waters such as the Black Sea, and the pollution of drinking waters. Several European countries implemented taxes levied on pesticides and fertilisers to tackle this environmental problem and the European Union adopted the Nitrate Directive in 1991 aiming to reduce nitrogen emissions.

International experiences show that taxation might be an effective instrument in reducing emissions and the usage of pesticides and fertilizers. However, taxing these products is a classic example of trying to control diffuse pollution meaning that the environmental impacts are difficult to address because the actual emissions are influenced by different factors, such the method of cultivation, the type of soil and chemicals application methods. The actual design of the taxes is therefore of great importance for the effectiveness of them and it is impossible to describe a 'first-best' economic instruments. This is why the UK government has been discussing a voluntary agreement with the agrochemical industry. The agreement contains measures about the chemical mixture of pesticides and fertilisers and application methods.

The Swedish pesticides tax

A pesticide charge, part of a larger agricultural programme of reducing environmental and health risk associated with the use of pesticides was first introduced in Sweden in 1984 (See also Parr and Reynolds, XXXX). The aim was to reduce the use of pesticides by 50 per cent during the period 1986-1990 and to achieve a further reduction of 50 per cent until 1996. Initially, the revenues of the charge were earmarked for financing pesticides action programmes. The earmarked charge was replaced by a tax in 1995 and the revenues were allocated to the state budget since then.

The current tax is levied as a fix amount of 20 SEK (2.2 EUR) applied to every kilogram of active ingredient in the pesticide. It is difficult to assess the effectiveness of the tax. However, in 1996 pesticides use expressed in kg per hectare in Sweden was around 0.5 kg per hectare, while the EU average was 2.2 kg per hectare.

The Danish pesticides tax

The design of the Danish pesticides tax is quite different from the Swedish example considering that the tax is an *ad-valorem* tax. However, the aims are very similar considering that the Danish tax is part of the 1986 Danish National Pesticides Action Plan aiming to halve the consumption of pesticides during a ten-year period and to shift consumption towards less harmful pesticides. The problems associated with pesticides use are reflected in the tax design because the tax is not differentiated according to toxicity or environmental impacts of different pesticides. The *ad valorem* pesticide tax rates is on average 37 per cent of the retail price[58].

The Swedish fertiliser tax

This tax shows quite some similarities with the Swedish pesticide tax discussed above. In 1984 it was introduced as an environmental charge for all chemical fertilisers and in 1994 the scheme was transformed into a tax. This transfer led to a zero tax rate for potassium in commercial fertilisers because it is assumed to have no negative environmental effects and in addition a charge on phosphorous was eliminated and replaced by a tax levied on the cadmium content of commercial fertilisers. The rate was set to 30 SEK (3.4 EUR) per gram of cadmium taking into account a threshold of cadmium content exceeding 5 gram per tonne of phosphorous. In addition the environmental tax amounts to around 1.8 SEK (0.2 EUR) per kilogram of nitrogen. Revenues from the tax were originally used for financing environmental projects and the tax amounted to around 20 per cent of the price of fertilisers in the mid 1990s but which is still the case in 2000. The administration costs of this tax are reported to be around 0.8 per cent of the revenues. Positive environmental effects in terms of a reduction of fertilisers use by 10 – 20 per cent are attributed to the tax.

However, the current rate is too low considering some environmental policy objective of a further N reduction of 7,850 tons for the year 2005. Based on the calculation carried out by the Swedish Board of Agriculture in 1999 a six to eight fold increase of the tax on fertiliser-N to between 10.5 and 15 SEK (1.2 – 1.7 EUR) per kg N would be required. This tax increase would lead to a dramatic price increase, at least a doubling of the price of fertilisers if the fertiliser industry would pass the tax payments completely onto the price of the product.

The Dutch scheme on nitrogen and phosphorous surplus [59]

The Dutch government introduced a levy system on the nitrogen and the phosphate surplus in 1998 with the aim of reducing emissions. The design of this tax system is rather interesting and is part of the 'Minerals Accounting System (MINAS)' because taxes on nitrogen and phosphorous (P2O5) surpluses must only be paid for exceedance of a threshold value, i.e. the so called levy free surplus per hectare.

The crucial aspect of this system is that farmers must record all N and P2O5 inputs and outputs so that a balance at farm level can be determined. The mineral balance, i.e. the N- and P2O5 surplus per hectare, is calculated as input per hectare minus output per hectare. A levy-free N and P2O5 surplus is allowed but which is reduced over time and only for the surplus exceeding this standard a tax has to be paid.

The policy driver for setting up MINAS was the objectives laid down in the EU Nitrate Directive. One of the objectives is to reduce and prevent surface and groundwater pollution caused by nitrates from agricultural sources. Furthermore, this example clearly shows the need for implementing a whole policy package covering economic instruments and regulatory measures for effective environmental policy.

Trading regimes in the United States

The United States follows a different approach with regard to applying economic instruments as compared to the situation in EU member states. The latter make regular use of taxes and charges for environmental policy and the former favours trading permits and rights. As discussed in Chapter 2 the main difference lies that European countries are relying on existing markets and the United States is creating new markets. Parr and Reynolds XXXX mention some examples of US experience in tradable rights with regard to water pollution, P and N,

and between point and non point, i.e. diffuse, sources. Favourable results of trading regimes can be found in the literature.

3.8.5 Other economic instruments

A whole range of other economic instruments is applied in many countries. In Denmark, a voluntary approach between the government and local authorities is reported aiming to phase out pesticides use by local authorities (ECOTEC 2001).

Labelling standards are also a regularly used tool for restricting the use of chemicals in agriculture. For example, an eco-labelling system was implemented in the Czech Republic in 1994 covering a variety of products, such as liquid cleaning agents, textile products, etc. Furthermore, a voluntary approach of reducing the environmental impact of washing powder has been established in 1995 (OECD/EEA database 2003 – http://www1.oecd.org/scripts/env/ecoInst/index.htm).

As mentioned above, revenues generated by effluent charges and other environmental taxes and charges are regular earmarked for environmental funds in many CEE and EECCA countries. The major share of the budget of these environmental funds have been used for financing environmental infrastructure investment in the water sector (Speck et al 2001b and OECD 1999).

3.8.6 Appropriateness for Black Sea countries

The international experience demonstrates that economic instruments can have an important signalling impact on water management issues. However, it has to be stressed that all these examples of international experience with regard to the use of economic instruments serve only illustrative purposes. This clearly implies that no unique 'recipe' for the selection and design of the appropriate economic instruments exists either in developed countries or in economies in transition.

Similarly, it has to be recorded that economic instruments are 'no panacea' for solving environmental problems and for overcoming other problems including the lack of enforcement capacity in countries studied in this report. The existence of a well functioning institutional framework is a prerequisite that economic instruments are working effectively. Enforcement requires not only technical expertise but also political support. Both features are regularly neglected in the political life because they are not high on the political agenda. Reasons are manifold reaching from the lack of technical equipment which is necessary for effective enforcement to corruption. In particular, environmental institutions must often be regarded as weak leading to a lax enforcement of economic instruments as well of regulatory measures.

Therefore, a direct transfer of economic instruments between is not recommended because the institutional, administrative, regulatory background is different from country to country, i.e. what works in one country need not to work in another country.

However, some of these problems can partly be solved in the process of designing economic instruments as it was the case in the German wastewater tax. A similar approach was proposed in Brazil[60]: the charge rates would be set at levels covering administrative and monitoring

costs at the beginning. A gradual increase of these rates would then follow over time taking into account pollution patterns into the determination of the charges, i.e. extending the charge base from a pure cost-covering charge to a charge with clear environmental features. Furthermore, the Dutch experience with regard to the wastewater tax scheme is also of some interest as a part of the revenues generated by the scheme have been used to financially support sensitive economic sectors to adapt to the more stringent environmental regulations. This approach allowed to eliminate and to reduce the potential negative consequences of more stringent environmental protection measures for these economic sectors.

This section has to be elaborated in more detail after we get the individual country reports – knowing the country problems and the country-specific situation.

4. SHORT LIST OF ECONOMIC INSTRUMENTS (RECOMMENDATIONS)

To be completed. A table like the following will be completed, in which each cell will give some assessment of the likely success of the instrument in each country or a selection of countries or the region as a whole. Note that there does not need to be a separate EI for each of the priority sectors – one EI (e.g. water pricing) could cover all three (and possibly other) sectors. The table will be filled on the basis of the analysis from the national experts and will be the product of the team workshop in early February.

EIs	Bulgaria	Georgia	Romania	Russian Federation	Turkey	Ukraine	Regional
User charges							
Etc.							

5. CONCLUSIONS AND NEXT STEPS

To be completed.

6. REFERENCES

Bell R. G., 2002, Are Market-Based Instruments the Right First Choice for Countries in Transition? *Resources* Winter 2002 Issue 146, pp. 10 – 14.

ECOTEC et al., 2001, *Study on the Economic and Environmental Implications of the Use of Environmental Taxes and Charges in the European Union and Member States*. Report for the European Union.
http://europa.eu.int/comm/environment/enveco/taxation/environmental_taxes.htm.

Eunomia et al., 2003, *Development of a Framework for Levy-Based Instruments for Environmental Policy in South Africa,* an internal report for National Treasury of South Africa.

European Commission (EC), 1997, *Proposal for a Council Directive Restructuring the Community Framework for the Taxation of Energy Products,* COM(97)30final, Brussels, Belgium.

European Commission (EC), 2000a, *Bridging our Needs and Responsibilities Together – Integrating Environmental Issues with Economic Policy,* COM(2000)576final, Brussels, Belgium.

European Commission (EC), 2000b, *Water Pricing in selected Accession Countries to the European Union, current policies and trends,* A report produced for the European Commission, DG Environment, Brussels, Belgium.

European Commission (EC), 2002, *Support to the Implementation of Environmental Policies and NEAPs in the NIS – Sub-Project Georgia: Increasing the Effectiveness of Economic Instruments Concept Paper: Revising the Georgian Pollution Tax System*, Brussels, Belgium.

European Commission (EC), 2003, *Support to the Implementation of Environmental Policies and NEAPs in the NIS – Sub-Project Georgia: Increasing the Effectiveness of Economic Instruments Working Note: Georgian Natural Resource Tax System*, Brussels, Belgium.

European Environment Agency (EEA), 2000, *Environmental Taxes: Recent Developments in Tools for Integration*, Copenhagen, Denmark.

European Parliament, 2001, *Effluent Charging Systems in the EU Member States,* Working Paper Environment Series ENVI 104 EN. www.europarl.eu.int

James D., 1997, *Environmental Incentives Australian Experience with Economic Instruments for Environmental Management*, Environment Australia.

Huber R.M., J. Ruitenbeek and R. S. da Motta, 1998, *Market Based Instruments for Environmental Policymaking in Latin America and the Caribbean – Lessons from eleven Countries,* World Bank Discussion Paper No. 381, World Bank, Washington, D.C., USA.

Ministry of Environment and Energy, DEPA, 2000, *Economic Instruments in Environmental Protection in Denmark*, Copenhagen, Denmark.

Organisation for Economic Co-operation and Development (OECD), 1972, *The Polluter Pays Principle: Analysis and Recommendations*, Paris, France.

Organisation for Economic Co-operation and Development (OECD), 1995, *The Effectiveness and Efficiency of Water Effluent Charge Systems: Case Study on Germany*, ENV/EPOC/GEEI(95)12, Paris, France.

Organisation for Economic Co-operation and Development (OECD), 1997, *Evaluating Economic Instruments for Environmental Policy,* Paris, France.

Organisation for Economic Co-operation and Development (OECD), 1999a, *Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries: A Survey,* Paris, France.

Organisation for Economic Co-operation and Development (OECD), 1999b, *The Price of Water Trends in OECD Countries,* Paris, France.

Organisation for Economic Co-operation and Development (OECD), 1999c, *Sourcebook on Environmental Funds in Economies in Transition,* Paris, France.

Organisation for Economic Co-operation and Development (OECD), 2000a, *Economic Instruments for Environmental Protection and Natural Resource Management: Georgia*, EAP TFS/DANCEE, Paris, France;
http://www.cowi.ru/almaty/documents.htm

Organisation for Economic Co-operation and Development (OECD), 2000b, *Economic Instruments for Environmental Protection and Natural Resource Management: Russian Federation*, EAP TFS/DANCEE, Paris, France;
http://www.cowi.ru/almaty/documents.htm

Organisation for Economic Co-operation and Development (OECD), 2000c, *Economic Instruments for Environmental Protection and Natural Resource Management: Ukraine*, EAP TFS/DANCEE, Paris, France;
http://www.cowi.ru/almaty/documents.htm

Organisation for Economic Co-operation and Development (OECD), 2001, *Environmentally Related Taxes in OECD Countries: Issues and Strategies*, Paris, France.

Organisation for Economic Co-operation and Development (OECD), 2003a, *The Use of Economic Instruments for Pollution Control and Natural Resource Management in EECCA*, CCNM/ENV/EAP(2003)5, Paris, France.

Organisation for Economic Co-operation and Development (OECD), 2003b, *Key Issues and Recommendations for Consumer Protection: Affordability, Social Protection, and Public Participation in Urban Waste Water Sector in Eastern Europe, Caucasus and Central Asia*, Paris, France.

Organisation for Economic Co-operation and Development (OECD), 2003c, *Social Issues in Provision and Pricing of Water Services*, Paris, France.

Organisation for Economic Co-operation and Development (OECD), *Database on Economic Instruments*, checked on October 7, 2003 at
http://www1.oecd.org/scripts/env/ecoInst/index.htm

Öko Inc, 2001, *Agricultural Water Management Policies in Bulgaria, Hungary, Romania and Slovakia*, final report for the Regional Environmental Center for Central and Eastern Europe (REC), Budapest, Hungary.

Parr B. and P. J. Reynolds, XXXX, *The development of process, stress reduction and environmental status indicators to monitor the effects of nutrients within the Black Sea Basin*, Draft Discussion Paper, Black Sea Implementation Unit, Istanbul, Turkey.

Schreiber H. et al., 2003, *Harmonised Inventory of Point and Diffuse Emissions of Nitrogen and Phosphorous for a Transboundary River Basin*, a report of the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety, Research report 200 22 232, Berlin, Germany.

Söderholm P., 1999, Environmentally Policy in Transition Economies: The Effectiveness of Pollution Charges, Lulea University of Technology, Lulea, Sweden.

Speck S., J. McNicholas and M. Markovic, 2001a, *Environmental Taxes in an Enlarged Europe*, The Regional Environmental Center for Central and Eastern Europe, Szentendre, Hungary.

Speck S., J. McNicholas and M. Markovic, 2001b, *Environmental Funds in the Candidate Countries*, The Regional Environmental Center for Central and Eastern Europe, Szentendre, Hungary.

Speck S. and A. Martusevich, 2003, *Reform of Pollution Charges in the Russian Federation: Assessment of Progress and Opportunities and Constraints for Further Improvement*, an internal report for OECD, Paris, France.

World Bank, 1998, *Pollution Prevention and Abatement Handbook*, Washington, D.C., USA.

Annex 1: Glossary of Terms

Administrative fee for discharge permits	A one-off or recurring payment for a discharge permit (to discharge effluents into natural waters). This is distinct from the effluent tax / charge because the amount to be paid is not connected to the amount of effluents discharged.
Direct discharge	The discharge of effluents or domestic sewage directly into natural waters (with optional treatment before discharge).
Direct discharger	Someone who discharges effluents or domestic sewage directly into natural waters, e.g.: industrial plants that discharge effluents directly into natural waters (with or without treatment); farmers that discharge effluents directly into natural waters (with or without treatment); households that discharge effluents directly into natural waters (with or without treatment); or operators of municipal sewage treatment plants.
Domestic sewage	Used water from households discharged into the sewer (system), or – after treatment – into natural waters.
Effluent	Used water from industry, farms and others discharged directly into natural waters or into the sewer (system) as well as the water discharged from a municipal or industrial sewage treatment plant into natural waters.
Effluent tax/charge	The money paid by direct dischargers for the direct discharge of effluents into natural waters. Usually, the charge is paid to a public or para-statal authority. The tax/charge base is the quanitity of the effluent or pollutants, such as suspendid solids, BOD, COD.
Extraction tax/charge	The money paid by companies, etc. extracting ground or surface water. Tax is paid to public or para-statal authority. The tax/charge base is generally the quantity of water extracted.
Indirect discharge	The discharge of effluents or domestic sewage into the sewer system (with or without pre-treatment).
Indirect discharger	Someone who discharges effluents or domestic sewage into the sewer system (with or without pre-treatment), e.g.: households discharging domestic sewage into the sewer system; industry discharging effluents into the sewer system; or farmers discharging effluents into the sewer system.
Sewage treatment plant or wastewater treatment plant	Installation that treats effluents, domestic sewage and rainwater discharged into the sewer system. The operators or owners of municipal sewage treatment plants may be municipalities, regional authorities, private companies, or others.

Sewer (system)	Canal (system) that collects the effluents of different users and directs them to a municipal sewage treatment plant.

User charge for water service	The money paid by water users (household, industry agriculture) for the delivery of water – independent from water usage/purposes; i.e. drinking water, cooling water, irrigation, etc. The user charge can (but need not) consist of different components, such as extraction tax, administration costs, costs associated with transport and distribution of water, VAT.
User charge for wastewater service – direct discharge	The money paid by household, industry, agriculture discharging effluents or domestic sewage directly into natural waters. The user charge can (but need not) consist of different components, such as administration costs, costs associated with transport and distribution of wastewater direct into natural waters, effluent tax/charge and VAT.
User charge for wastewater service – indirect discharge	The money paid by household, industry, agriculture discharging effluents or domestic sewage into the sewer system (with or without pre-treatment). The user charge can (but need not) consist of different components, such as administration costs, costs associated with operating a wastewater treatment plants, costs associated with transport and distribution of wastewater direct into natural waters, effluent tax/charge and VAT.

Reference: European Parliament 2001 and own discussion.

The term ‘user charge’ is used as a synonym for ‘cost-covering charge’ or ‘user fee’. The term ‘tariff’ is often used synonymously too.

User charges / tariffs have to be paid by water consumers and the revenues are collected by water utilities. However, parts of the revenues have to be transferred to public authorities, i.e. revenues collected as VAT payments and liabilities as a consequence of extraction tax/charge and of effluent tax/charge.

Appendix V

Memorandum of Understanding between the ICPBS and ICPDR on Common Strategic Goals (pdf file)

ANNEX A: CO-FINANCING BY THE BLACK SEA COMMISSION

Total BSC and BS countries contributions

The overall budget of the BSC and its Permanent Secretariat comprises the following:

e) BSC PS – annual budget;
f) BSC advisory groups
g) Participating countries
h) Others

Total Contributions

e) BSC PS

Year	2003-2004	2004-2005	2005-2006	Total
Operational BSC Budget, USD	261,360	261,360	261,360	**784,080**

f) BSC PS

Year	2003-2004	2004-2005	2005-2006	Total
Advisory groups, USD	118,000	118,000	118,000	**354,000**

g) Joint activities of the participating countries

Year	2004	2005	2006	Total
Joint activities, USD	0	0	0	**0**

h) Other

Year	2004	2005	2006	Total
European Commission, USD	44,776[61]	44,776	0	**89,552**

Summary Table of the BSC and BS countries contribution

Budget Item	2003-2004	2004-2005	2005-2006	Total
BSC Budget	261,360	261,360	261,360	**784,080**
BSC AGs	118,000	118,000	118,000	**354,000**
Joint Activities	0	0	0	**0**
Others	44,776	44,776		**89,552**
Total	**424,136**	**424,136**	**379,360**	**1,227,632**

BSC Budget

Summary of the contributions of the Contracting Parties

	2004	2005	2006
Bulgaria	43,560	43,560	43,560
Georgia	43,560	43,560	43,560
Romania	43,560	43,560	43,560
Russian Federation	43,560	43,560	43,560
Turkey	43,560	43,560	43,560
Ukraine	43,560	43,560	43,560
Total	261,360	261,360	261,360

Budget for the year 2003-2004 (USD)

Contracting Parties	Contribution share (%)	Amounts (USD)
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261,360**
DG AidCo		**Euro 36,000**

Total Expenditure

Operational Costs (USD)	39,360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72,000
Total	**261 360**
Seconded staff by EC DG AidCo	**Euro 36 000**

Budget for the year 2004-2005 (USD)

Contracting Parties	Contribution share (%)	Amounts (USD)
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261,360**
DG AidCo		**Euro 36 000**

Total Expenditure

Operational Costs (USD)	39 360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72 000
Total	**261 360**

Seconded staff by EC DG AidCo	**Euro 36 000**

Budget for the year 2005-2006 (USD)

Contracting Parties	Contribution share (%)	Amounts
Bulgaria	16.67	43,560
Georgia	16.67	43,560
Romania	16.67	43,560
Russian Federation	16.67	43,560
Turkey	16.67	43,560
Ukraine	16.67	43,560
Total contribution	**100**	**261 360**

Total Expenditure

Operational Costs (USD)	39 360
Personnel Costs (USD)	150,000
Activities under the Work Program (USD)	72 000
Total	**261 360**

Expenditures per Advisory Groups

Advisory Group		2003-2004	2004-2005	2005-2006	Total
AG ESAS	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG FOMLIR	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG PMA	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG ICZM	**Domestic**	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**

Advisory Group		2003-2004	2004-2005	2005-2006	Total
AG CBD	Domestic	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG LBS	Domestic	7,200	7,200	7,200	**21,600**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	15,200	15,200	15,200	**45,600**
AG IM	Domestic	5,400	5,400	5,400	**16,200**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	13,400	13,400	13,400	**40,200**
EG WFD	Domestic	5,400	5,400	5,400	**16,200**
	Meetings	8,000	8,000	8,000	**24,000**
	Subtotal	13,400	13,400	13,400	**40,200**
Total		**118,000**	**118,000**	**118,000**	**354,000**

Activities	ESAS		FOMLIR		PMA		ICZM		CBD		LBS		IM		WFD	
Countries	m-d	US$	m-d	US$	m-d	US$	m-d	US$	m-d	US$	m-d	US$	m-d	US$	m-d	US$
Bulgaria	90	2700	30	900	30	900	30	900	30	900	30	900	30	900	30	900
Georgia	30	900	30	900	30	900	30	900	90	2700	30	900	30	900	30	900
Romania	30	900	90	2700	30	900	30	900	30	900	30	900	30	900	30	900
Russia	30	900	30	900	30	900	90	2700	30	900	30	900	30	900	30	900
Turkey	30	900	30	900	30	900	30	900	30	900	90	2700	30	900	30	900
Ukraine	30	900	30	900	90	2700	30	900	30	900	30	900	30	900	30	900
Total	7200		7200		7200		7200		7200		7200		5400		5400	

Calculations are made based on the assumption that the average expenditures in the region and for the time period in question amount to 30 USD/d

The average expenditures for a meeting of an advisory group amount to USD 8,000.

ANNEX B: EUROPEAID INPUT

Publications Office
Ted
tenders electronic daily
Supplement to the Official Journal of the European Union
current language data

02/05/2003 S85 PHARE, TACIS and countries of Central and Easter
Tender notice

Go to paragraph: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.

B-Brussels: Tacis - investment facility for the Black Sea

2003/S 85-075302

Service contract forecast

Georgia, Russia and Ukraine.

1. **Publication reference:** EuropeAid/116448/C/SV/Multi
2. **Procedure:** Restricted.
3. **Programme:** Tacis.
4. **Financing:** Regional environmental programme 2002.
5. **Contracting authority:** European Commission, on behalf of beneficiary c Brussels.
6. **Nature of contract:** Technical assistance.
7. **Contract description:** The objective of this facility is to support investme pollution remediation affecting the Black Sea and its basins.
   Main components are:
   - to assist in identifying high priority, high impact environmental investme
   - to assist in identifying so called 'win-win' investments;
   - to support planned loans with feasibility and pre-feasibility studies.
8. **Indicative maximum budget:** 4 000 000 EUR.
9. **Intended timing of publication:** June 2003.
10. **Additional information:** Not applicable.
11. **Legal basis:** EC Council Regulation (Euratom, EC) No 99/2000 of 29.12.1 concerning the provision of assistance to the partner states in eastern Eur central Asia.

Remarks:
There must be a minimum period of 30 calendar days between the publication o forecast and the publication of the corresponding procurement notice.
No applications or requests for information should be sent at this stage.

UNDP-GEF Black Sea Ecosystem Recovery Project
Project Implementation Unit
Dolmabahce Sarayi, II. Hareket Kosku 80680 Besiktas, Istanbul - TURKEY
Tel: 90.212.310 29 24, 90.212.310 29 27
Fax: 90.212.227 99 33
e-mail: pjreynolds@blacksea-environment.org
web: www.bserp.org