

### UNDP/GEF Black Sea Ecosystem Recovery Project

# REPORT TO THE STOCKTAKING MEETING OF THE DANUBE / BLACK SEA STRATEGIC PARTNERSHIP NOVEMBER 2004

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### 1 GEF Project Activities in the frame of the Danube – Black Sea Strategic Partnership (SP)

### 1.1 Brief chronicle of GEF assistance since 1993 in the Black Sea region and analysis of past and current objectives

#### 1.1.1 Purpose and overall objectives of GEF intervention in the Black Sea region

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 current GEF/UNDP Black Sea Ecosystem Recovery Project (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 (2007), it is expected that the institutional mechanism of the BSC 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.

### 1.1.2 Consequent development from BSEP (1993-1999) to BSERP (2002-2007), responding to a new challenge

The Black Sea Environmental Programme 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. 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 provided 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.

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 EU 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.

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. 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.

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. 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.

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.

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. The BS-SAP 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.

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 BSC 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.

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

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. 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 BSC 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.

#### National legal and policy tools

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 accession countries seeking 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. 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.

#### National resources and commitment

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.

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\$ 788,976,676).
- 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, Ukraine and Georgia, have yet to fulfill their commitment).

In accordance with the outcomes of the previous interventions in the region, the BSC 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 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. The GEF assistance, i.e. Black Sea -Danube River Basin Strategic Partnership is designed as three complementary components:

- Two Regional Projects for the Black Sea and the Danube River Basin which will be implemented in two Phases between (2002-2003) and (2004-2007);
- A series of country-related investment projects executed through the World Bank-GEF Nutrient Investment Facility;
- Other GEF and donor interventions in the basin targeting reduction of nutrients/toxic pollutants and restoration of critical habitats.

The GEF Black Sea/Danube Basin Strategic Partnership is designed to 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, 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, including the economic instruments; highlighting the significance of certain interventions -investments- in terms of environmental-

economic costs and benefits etc. 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 had to be 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 original 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 1. 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: 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: 25 million \$.

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 1, and 6,000,000 for Phase 2) have been left the 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.

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.

Table 1 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	<ol> <li>Link to the ICPDR/DRP on implementation of WFD in coastal areas (in particular in Romania);</li> <li>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;</li> <li>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;</li> <li>Incorporate policies and technologies developed by the DRP for municipal sector for BG, RO, and UA (the Danube Pollution Reduction Programme);</li> <li>Link to ICPDR database developed for DABLAS.</li> </ol>
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	<ol> <li>Data and methodology from ICPDR cruises in Danube delta;</li> <li>Emission data from DANUBS will be used;</li> <li>Incorporation with the DRP for BG, RO and UA, BSERP - in 3 other countries</li> </ol>
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.

Table 2: Overview of Contribution of the BSERP Project Activities to the Strategic Partnership Objectives

	Strategic Partnership Objectives		BSERP Project Objectives / Act	tivities	
		1. Development of Policies	2. Capacity Building & Transbound. Cooperation	3. Public Participation	4. Monitoring & Evaluation
1	In support of the implementation of the Black Sea Strategic Action Plan and the "Common Platform for Development of National Policies and Actions for Pollution Reduction under the Danube River Protection Convention", and taking into account the mandate of the Sofia and Bucharest Conventions, Danube/Black Sea basin countries adopt and implement policy, institutional and regulatory changes to reduce point and non-point source nutrient discharges, restore nutrient 'sinks', and prevent and remediation of toxics "hot spots".	<ul> <li>ICZM policies</li> <li>Agriculture policies</li> <li>Wetland, Land-use and Nature Protection policies</li> <li>Detergents</li> <li>Sustainable Fisheries</li> <li>Revised SAP</li> </ul>	<ul> <li>Development of Regional Financial Intermediateries</li> <li>Regional Capacity Building Workshops</li> <li>International Study Group Activities</li> <li>TrainSeaCoast</li> </ul>	Development of a strategy/mechanism for public consultations	- Integrated system for Monitoring of the Environmental State - Implementation of GPA work programme for the Black Sea region
2	Countries gain experience in making investments in nutrient reduction and prevention and remediation of toxics "hot spots".	- Industrial Policies - Municipal Policies	- Regional Capacity Building Workshops	Development of a strategy/mechanism for public consultations	- Process and stress reduction indicators - Implementation of revised LBA Protocol
3	Capacity of the Danube and Black Sea Convention Secretariats is increased through, sustainable funding, and development of international waters process, stress reduction and environmental status indicators adopted through Convention processes.		<ul> <li>Inter-ministerial coordination mechanisms</li> <li>Integrated Monitoring and coastal Emission inventory</li> <li>Contingency planning</li> <li>BSIS InfoSystem</li> <li>Regional training</li> </ul>	Development of the coastal information advisory centres,     Small Grant Programmes	- Process, Stress Reduction and Environ. Status Indicators - Attraction of additional funding PPPs
4	Country commitments to a cap on nutrient releases to the Black Sea at 1997 levels and agreed targets for toxics reduction for the interim, and possible future reductions or revisions using an adaptive management approach after 2004 are formalized into specific nutrients control and toxics discharge protocol(s) or Annex(es) to both Conventions.	Nutrient management plans and programmes (contained within revised SAP)     NEAPs	- Regional Capacity Building Workshops	Development of a strategy/mechanism for public consultations	- Annual reporting to the BSC - Additional data collection and assessment
5	Implementing Agencies, the European Union, other funding partners and countries formalize nutrient and toxics reduction commitments into IA, EU and partner regular programs with countries.	- Cooperation with ARENA, ELME, EuropeAid Black Sea Investment Facility, and a new EuropeAid Black Sea Environmental Programme	Coordinated training, procurement, support to regional experts		Progress reports, coordinated activities
6	Pilot techniques for restoration of Danube/Black Sea basin nutrient sinks and reduction of non-point source nutrient discharges through integrated management of land and water resources and their ecosystems in river sub-basins by involving private sector, government, NGOs and communities in restoration and prevention activities, and utilizing GEF Biodiversity and MSP projects to accelerate implementation of results.	<ul> <li>Rapid assessment of diffuse pollution</li> <li>Oil pollution tracking system</li> <li>Pilot Monitoring Exercises</li> <li>Participation in setting up of transboundary Marine Protected areas, Fishery free zones</li> </ul>	<ul> <li>Regional Capacity Building Workshops</li> <li>Procurement of needed equipment</li> <li>Incorporating in international expert network</li> <li>Inter-calibration exercised</li> <li>Scientific Black Sea Conference (2006)</li> </ul>	NGO Support     Small Grants     Communication     and Awareness	<ul> <li>Process indicators</li> <li>Conference proceeding</li> <li>Regional harmonisation</li> </ul>

### 1.1.3 Cooperating links with the GEF Danube Regional Project, the WB and UNEP and driving forces/reasons for developing the Strategic Partnership

The BSERP and DRP are two regional projects overlapping both territorially and technically. Three of the six Black Sea countries<sup>1</sup> 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 a 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). Work programmes of the two GEF projects are lined up correspondingly between themselves, and those of the Commissions (Table 1). An Overview of Contribution of the BSERP Project Activities to the Strategic Partnership Objectives is presented in Table 2.

#### 1.2 Objectives and strategies of the UNDP/GEF Black Sea Ecosystem Recovery Programme

The long-term and intermediate objectives of the BSERP 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.

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.

#### Strategy for reaching the objectives

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.

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. The actions identified in the current project are farreaching 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

<sup>&</sup>lt;sup>1</sup> Bulgaria, Romania, and Ukraine.

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.

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.

The outputs of the current Phase 1 activities have 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 Joint Technical Working Group between the BSC and the ICPDR 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 of appropriate measures to limit discharge of nutrients. A task force (DABLAS Task Force) was established by the EU, BSC, ICPDR and IFIs as a platform for common decision making and encouraging investments for environmental protection, in particular for reduction of eutrophication. BSERP participates in the process. 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<sup>2</sup>. 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, 2004 and 2005. A reference book for coastguards, fishing communities has recently been completed and is currently being distributed in the coastal regions of the Black Sea. A web page for the project had been developed

<sup>&</sup>lt;sup>2</sup> English, Russian and Ukrainian were published previously

(www.bserp.org) 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 early 2004 due to limited data availability. Before suggesting commitments for the region and individual countries, the analysis and planning process undertaken by the UNEP/GPA, took full account of economic, social, and political realities of the region such as the EU accession. 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. Phase 1 activities were planned to provide a policy paper and technical recommendations for regional consultation regarding the revision of the LBA protocol. UNEP has recently completed this activity. The official adoption of the new LBA Protocol by the Black Sea countries is expected to be concluded before the end of Tranche 2. 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 was recently completed.

### 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. Further cruises are planned for September 2005 and January 2006. The cruises will make a major contribution to the next State of the Black Sea report by (i) enabling a new Black Sea nutrient balance, (ii) helping to distinguish between natural and human-induced processes, (iii) following the recovery of key systems, and (iv) contributing samples for archiving or pilot monitoring purposes. None of this would be available by alternative means. The cruises will also contribute new capacity and experience to Black Sea research.

# 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 Objective 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 were planned for initiation during the latter part of Phase 1. These included 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 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 carried out 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 is currently finalizing the architecture for relational databases in which the results of the data collation exercise are stored. 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 completed in mid-2004. The environmental status indicators are currently being 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 totaling 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 2005. 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 early part of Phase 2 (2004). A Black Sea Train Sea Coast course has been developed for the agricultural management of nutrients in coastal regions. The course was recently completed with first delivery in the Black Sea coastal region planned in early 2005.

## 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 was 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 has recently been completed 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 harmonizing principles and guidelines of 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. 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.

#### 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).

### 1.3 Cooperation with the BSC in support of the BSC Work Plan and cooperating links with IA, the EC and other donor driven initiatives

A schematic representation of the linkages of the between the BSERP PIU and agencies on the international, regional, national and local levels is shown in Figure 1. 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. 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. 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.

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).

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

The BSERP and DRP are two regional projects overlapping both territorially and technically. Three of the six Black Sea countries<sup>3</sup> 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 a 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). Work programmes of the two GEF projects are lined up correspondingly between themselves, and those of the Commissions (see Table 1 above).

<sup>&</sup>lt;sup>3</sup> Bulgaria, Romania, and Ukraine.

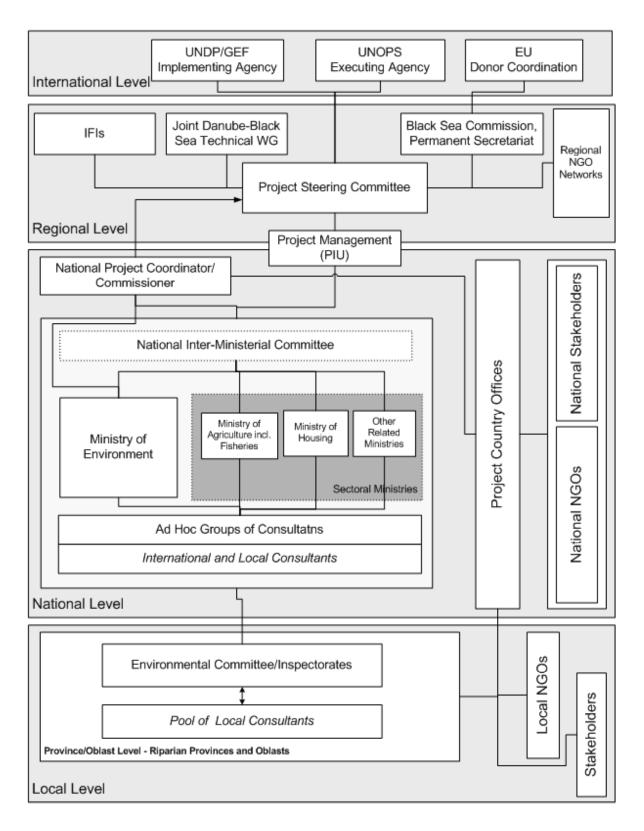


Figure 1 Institutional Arrangements for the Implementation of the BSERP at the International, Regional, National and Local Levels.

#### **Government Inputs**

All six riparian Governments are 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 to cover Black Sea hot-spots.

Each Government aims to provide the 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-à-vis the Bucharest Convention and the BSSAP. The total input of the Black Sea countries and associated financing from bilateral, the EU and NGOs amounts to USD 812,046,589 (see Table 3 below).

Table 3 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	

A more detailed description of the funding available in each of the Black Sea countries, as well as a breakdown of inputs is presented below in Section 2.2.

### 1.4 Budgetary contributions from UNDP-GEF to reinforces implementation of BSC Work Plan and related activities

#### **GEF Inputs**

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\$ 6,000,000 for the second phase. The indicative timeframe for the Phase 2 is November 2004-October 2007.

#### **UNDP** Inputs

As the Implementing Agency, UNDP supports 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 backstops 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 acts as the Principal Resident Representative for the Project.

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)

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. 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). 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.

The total input of the UNDP is estimated as US\$ 16,325,000 (see Table 4).

**Table 4** Total UNDP input (Estimated)

Activities	USD
Bulgaria: National Capacity Self-Assessment for Global Environmental	198,300
Management	
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

#### 2 Progress and Achievements of the Black Sea Environmental Recovery Programme

### 2.1 Adopting and implementing of policies for improved water quality management and adjusting of institutional and legal instruments (SP Objective 1)

#### 2.1.1 Facilitating implementation of the LBA Protocol at national level

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 included (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) mechanisms for reporting and data exchange in the revised protocol. UNEP has recently completed the development of a new LBA Protocol. A number of local consultants/focal points were 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. The official adoption of the new Protocol by the Black Sea countries is expected to be concluded before the end of Tranche 2. The Protocol 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.

### 2.1.2 Introducing integrated coastal zone management with focus on marine protected areas and land use & wetland rehabilitation

ICZM policies and strategies for the Black Sea coastal states (1999), developed by the ICZM Activity Centre, Krasnodar, Russian Federation (supported by Tacis), 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 necessary. The decision on a 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, as 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. 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). 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.

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.

### 2.1.3 Establishing an agricultural emission inventory (point and non point sources) and developing sector policies and concepts for BAP in coastal zones

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. 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.

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.

#### 2.1.4 Introducing industrial and transport sector policy reforms and application of BAT

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 DRP 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. The BSERP will act in Phase 2 to extend the review and the modality for the implementation of BAT to the Black Sea countries not involved in the corresponding activities of the DRP. 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. 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. 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.

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.

#### 2.1.5 Introducing policies and legal instruments for pollution reduction from the municipal sector

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" 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. 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. 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.

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.

#### 2.1.6 Development of the Convention on responsible fisheries and proposals for fishery free zones

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). The BSERP will assist the BSC 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.

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.

### Socio-economic analysis and indicators linked to cost effective measures for nutrient reduction (structural and non structural projects)

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. 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.

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.

#### <u>Indicators SP Objective 1 (see Table 5 below)</u>

- (i) By 2007, 100% of participating countries introduce one or more policy or regulatory measures (including P-free detergents) to reduce nutrient discharges in the agricultural, municipal, or industrial sectors, to restore nutrient sinks (wetlands, flood plains), and to prevent/remediate toxics "hot spots",
- (ii) 50% adopt multiple policy measures, towards goals of maintaining 1997 levels of nutrient inputs to the Black Sea, and reducing toxics contamination in the basin.

Table 5 Current policy or regulatory measures developed by the BSERP to reduce nutrient discharges in the agricultural, municipal, or industrial sectors, to restore nutrient sinks (wetlands, flood plains), and to prevent/remediate toxics "hot spots"

Policy measure	Bulgaria	Georgia	Romania	Russia	Ukraine	Turkey
Land-based Activities	Revised protocol on LBA is considered by the BSC during its meeting in Istanbul on 1-3 Nov 2004.					
ICZM	Regional ICZM strategy developed by the BSC will be further supported by the project in its Phase II					
Fisheries	A new legally binding document on Fisheries in the Black Sea region, Setting up of fishery free zones in the Black Sea					

# 2.2 Financial engagement and co-financing from national sources for implementation of investment projects in pollution reduction measures in line with the objectives of the SAP (SP Objective 2)

### 2.2.1 National investments for municipal and industrial waste water treatment and other infrastructural measures

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. 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. 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. 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).

#### 2.2.2 Calculation of Baseline and Incremental Costs

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 and 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. 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 (Table 17 below), as well as a Tacis Project, which amounts to \$4,104,474 are considered as "incremental" cofinancing 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. For the definition of "baseline" costs, as shown in Table 3 above, a total of 828.37 million USD (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, contributes 17,716,802 USD.

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. Each Government provides 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 fulfilment of the programmatic and budgetary commitments made vis-à-vis the Bucharest Convention and the BSSAP. The total input of the Black Sea countries amounts to USD 812,046,589 (see Table 3 above). A more detailed description of the funding available in each of the Black Sea countries, as well as a breakdown of inputs is presented below.

#### Bulgaria

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 8 below) and will comprise of the sewerage and sewage treatment plants construction works – Danube and Black Sea basin (source - Programme for implementation of Directive 91/271) (see Table 6).

Table 6 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

a) Projects running - international funding

Table 7 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	PHARE	1,000,000		1,243,780
directorates for implementation of the WFD	twinning			
Pilot project for environmental risk assessment in the	Republic	500,000		621,890
lower Danube and Iskar	of Italy			
Total		3,650,760		4,540,742

b) 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).

Table 8 Total Input from Bulgaria within 2004-2006

River Basin	Euro	Rate	USD
Sewerage and sewage treatment plants construction works in	223,945,000	1.24378	278,538,312
Bulgaria			
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

#### Georgia

Input from Georgia are presented in Table 9 below:

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

Table 9 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	43,900
- Artificial restoration of stock of sturgeon species	42,500
Sub-Total	86,400
TOTAL	7,686,400

#### Romania

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 10 below:

Table 10 Total Input from Romania within 2004-2006

Project	Euro	Rate	USD
1. WWTPs upgrading, rehabilitation of sewage network,	96,000,000	1.24378	119,402,880
waste water pumping stations, rehabilitation of waste			
water discharging pipelines (repair, extending,			
diffusion systems)			
2. Rehabilitation and protection of the coastal zone	168,000,000		208,955,040
against erosion (light and heavy solutions,			
monitoring) – Pro-rated from 2004-2008.			
3. Implementation of the WFD and ICZM in transitional	503,000		625,621
and coastal waters in Romania			
4. PHARE Integrated Monitoring of the Black Sea	$2,870,000^4$	_	3,569,649
littoral between Midia and Vama Veche			
Total	7,686,400		332,553,190

#### The Russian Federation

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. 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 socioeconomic 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. A detailed distribution of funds within the Programme "South of Russia" is presented in Table 11 below:

 $<sup>^{\</sup>rm 4}$  Contribution of the Romanian government for this project is 670,000 Euro.

Table 11 Total Input from Russia within 2004-2006

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

#### Turkey

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 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 Table 12 below:

Table 12 Total Input from Turkey within 2004-2006 (Estimates are based on 2004 amounts)

Project	TRL	Rate	USD
National Action Plan for the Land Based	200,000,000,000	1,310,000	458,015
Pollution Sources	*3 years		
Dellution Monitoring and Assessment	450,000,000,000		1,030,534
Pollution Monitoring and Assessment	*3 years		
	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

#### Ukraine

National and international programmes and activities aimed at the improvement of the Black Sea Environment scheduled for 2004 totals 86,066,784.

Table 13 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			$2,140,000^5$
Total			86,066,784

### 2.2.3 National investments for non-structural measures, e.g. implementation of policies strategies etc. (WB, EU funding etc)

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

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<sup>&</sup>lt;sup>5</sup> 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.

increasingly important for the three countries seeking accession to the EU (Bulgaria, Romania, and Turkey). 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.). Table 14 summarises the reported investment activities to reduce nutrient and hazardous substances in the Black Sea-Danube basin, based on the results of the Survey Questionnaire (August 2004) and information from the World Bank website (www.worldbank.org/blacksea-danube). The results indicate a total of 28 reported projects with a total estimated capital cost of US\$ 668.9 million, of which the WB/GEF facility has and will contribute an estimated US\$ 99.1 million (15%). Most of the projects are modest in size (US\$ 8 to 25 million), with the exception of four (4) projects: (i) Romania Agricultural Pollution Control Project (future extended project) with a possible reported investment of US\$ 100 million; (ii) Turkey Agricultural Pollution Control Project - US\$ 69.6 million; and (iv) Slovenia National Pollution Reduction Project – US\$ 55.8 million. The three groupings in Table 14 are summarised as follows:

- Project reported in completed survey questionnaires a total of 19 projects and related activities were reported with an estimated total value of US\$ 244.6 million, of which the World Bank/GEF contribution is an estimated US\$ 48.6 million (20%).
- Other Projects: World Bank/GEF Investment Fund for Nutrient Reduction in the Black Sea-Danube Basin a further eight (8) WB/GEF supported projects are summarised on the website cited above. They have a total reported value of US\$ 368.5 million, of which the WB/GEF contribution is an estimated US\$ 40.5 million (11%).
- Other Projects: EBRD/GEF Environmental Credit Facility the EBRD and GEF are also supporting the Slovenia National Pollution Reduction Project which has an estimated cost of US\$ 55.8 million, of which GEF is contributing US\$ 10 million (18%).

Table 14 Reported Investment Activities to Reduce Nutrient and Hazardous Substance Pollution in Black Sea-Danube Basin

Investment Activities	Projects	Investment (US\$ million)			
	(nos.)	Total	WB/GEF	Others	
Projects Reported in Completed Survey Questionnaires					
Completed Investment Activities	1	8.0	4.0	4.0	
Current and Ongoing Investment Activities	8	59.3	26.5	32.8	
Future Investment Activities – Committed & Potential	10	177.3	18.1	159.2	
Sub-total	19	244.6	48.6	196.0	
Other Projects - World Bank/GEF Investment Fund for Nu	trient Reduc	ction in th	e Black Sea-D	anube Basin	
Projects – Current, Ongoing and Future	8	368.5	40.5	328.0	
Other Projects – EBRD/GEF Environmental Credit Facility					
Slovenia National Pollution Reduction Project	1	55.8	10.0	45.8	
Grand Total	28	668.9	99.1	569.8	

Table 15 provides a separate summary of the 13 projects that are partially supported by WB/GEF grants under the Black Sea Danube Nutrient Reduction Investment Fund. These projects are in various stages of implementation and review. The total estimated investment amounts to US\$ 486.3 million, of which GEF grants amount to US\$ 72.7 million (15%). The projects focus on nutrient reduction and agricultural pollution control in 10 countries.

Table 15 WB/GEF - Black Sea-Danube Nutrient Reduction Investment Fund Projects

Project	Status with	Fun	ding (US\$ mi	llion)
	<b>World Bank</b>	GEF	Со-	Total
		Grant	Funding	
<b>Under Implementation</b>				
Romania Agricultural Pollution Control	Approved Dec. 2001	5.15	5.65	10.80
Bulgaria Wetlands Restoration and Nutrient				
Reduction	Approved June 2002	7.50	6.00	13.50
Sub-total Sub-total		12.65	11.65	24.30
<b>Under Implementation and Preparation (inc</b>	luded in GEF Pipelin	ie)	•	•
Hungary Nutrient Reduction	Approved July 2003	7.50	17.00	24.50
Turkey Anatolia Watershed Rehabilitation	Approved Oct. 2003	6.67	63.00	69.67
Moldova Agricultural Pollution Control	Approved Feb. 2004	5.00	40.00	45.00
Russia Krasnodar Agricultural Pollution Control	Approved Feb. 2004	5.00	7.00	12.00
Russia Rostov Reduction of Nutrient Discharges				
and Methane Emissions	Approved Mar. 2004	5.85	16.00	21.85
Sub-total Sub-total		30.02	143.00	173.02
<b>Pending GEF Pipeline Inclusion</b>				
Croatia Zagreb Municipal Nutrient Reduction	Grant Req. Feb. 2003	8.00	200.00	208.00
Moldova Environmental Protection	Grant Req. Mar. 2003	3.00	12.00	15.00
Serbia Reduction of Enterprise Nutrient Discharges	Grant Req. Apr. 2003	6.00	17.00	23.00
Bosnia Environment Infrastructure	Grant Req. May 2003	4.00	12.00	16.00
Sub-total		21.00	241.00	262.00
New Project Concepts under World Bank Re	eview			
Turkey Samsun Fertilizer Factory Nutrient Reduction	Grant Req. June 2003	5.00	10.00	15.00
Ukraine Integrated Coastal Zone Management	Grant Req. June 2003			
-	_	4.00	8.00	12.00
Sub-total		9.00	18.00	27.00
Total		72.67	413.65	486.32

Source: World Bank website (www.worldbank.org/blacksea-danube).

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. A notable regional activity is the Tacis Project "Black Sea Investment Facility" (EuropeAid/116448/C/SV/Multi), which totals to EUR 3,300,000.

The European Union (through the European Commission) has five programmes that are active in the Danube-Black Sea basin, with an important focus on environmental issues (especially water pollution and wastewater discharges into the River Danube and its tributaries) in the accession and pre-accession countries of Eastern Europe. Basic data on these activities was provided by the European Commission (DG Environment and The Danube – Black Sea Cooperation – DABLAS Task Force). Recently, the European Commission published a useful background document, entitled: Inventory of EU Policies and Actions in the Danube Region, External Relation Directorate General, July 2004:

- The five EC programmes that have components which address directly and indirectly environmental issues in the Black Sea-Danube basin are:
- CARDS Community Assistance, Reconstruction, Development and Stabilisation
- TACIS Technical Assistance Cooperation for the Confederation of Independent States

- PHARE Poland and Hungary Assistance for the Reconstruction of the Economy
- CADSES Central, Adriatic, Danubian and South-East Europe Space
- ISPA Instrument for Structural Policies for Pre-Accession

The environmental investment and programme activities are summarised in Table 16. The figures indicate that the EU has and is supporting 100 projects in the Black Sea-Danube basin with a total estimated contribution of € 1.5 billion (US\$ 1.9 billion equivalent). Most of these financial resources are committed to the ISPA programme (96% of the total) which focuses on direct environmental investments, mainly in municipal wastewater treatment plants.

The figures for each of the five programmes are summarised as follows:

- CARDS eight (8) projects with an EU contribution of € 33.4 million (US\$ 40.4 million equivalent) in the Balkan countries, with the main focus on technical assistance, planning and an investment support facility. The only exception is the Danube Clearance Project in the aftermath of the recent conflicts in the region (€ 14.6 million or US\$ 17.7 million equivalent).
- TACIS four (4) projects with an EU contribution of € 10.1 million (US\$ 12.2 million equivalent) to finance modest technical assistance, planning and an investment support facility for Hungary (Tisza River), Ukraine and the Black Sea in general.
- PHARE three (3) projects with an EU contribution of € 8.1 million (US\$ 9.8 million equivalent) focused cross-border environmental projects between Bulgaria, Hungary, Slovakia and Romania.
- CADSES three (3) projects with an EU contribution of € 4.5 million (US\$ 5.5 million equivalent) dealing with land use, river basin management and environmental infrastructure on tributaries of the River Danube.
- ISPA 82 projects in most of the Danube countries in Eastern Europe with an estimated total investment cost of € 2.2 billion (US\$ 2.6 billion equivalent), of which the EU has and will contribute € 1.74 billion (US\$ 2.1 billion equivalent) on a grant basis.

Table 16 Reported Environmental Investment Programmes and Projects Supported by EU in Black Sea-Danube Basin

Program	Projects	<b>EU Contribution</b>		<b>Total Estimated 1</b>	Investment Cost
	(nos.)	US\$ million (1)	€ million	<b>€</b> million	EU %
CARDS	8	40.4	33.4	n.a.	
TACIS	4	12.2	10.1	n.a.	
PHARE	3	9.8	8.1	n.a.	
CADSES	3	5.5	4.5	n.a.	
Sub-total	18	67.9	56.1	n.a.	
ISPA					
Bulgaria	6	125.4	103.6	138.2	75%
Czech Republic	8	201.0	166.1	244.2	68%
Hungary	19	391.7	323.7	546.6	59%
Romania	23	760.0	628.1	851.3	74%
Slovakia	18	212.5	175.6	304.5	58%
Slovenia	8	52.4	43.3	85.3	51%
Sub-total	82	1,743.0	1,440.4	2,170.1	66%
Total	100	1,810.9	1,496.5	2,170.1	

### 2.2.4 Cooperation with DABLAS and with IFIs (WB, EBRD, EIB, others) and effective results obtained

Phase 2 of the BSERP 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. 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.

#### Indicators SP Objective 2 (see tables 14-16 above)

100% of participating countries initiate one or more investments in agricultural, municipal, land use or industrial sectors for nutrient discharge reduction, nutrient sink restoration, and prevention and remediation of hot spots of toxic substances, some with GEF assistance, by 2007 to accompany expected baseline investments.

### 2.3 Support to the BSC (capacity building) provided by the GEF BSERP and co-financing though payment of contributions (SP Objective 3)

### 2.3.1 <u>Co-financing from Black Sea countries</u> (payments of contributions to the BSC, in-kind contributions (Activity centers, Advisory Groups, etc),

The BSC 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 and the BSERP have been closely coordinated and lined up. 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 overall budget of the BSC and its Permanent Secretariat comprises the following:

- a) BSC Permanent Secretariat annual budget;
- b) BSC advisory groups
- c) Participating countries
- d) Others

#### 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	$44,776^6$	44,776	0	89,552

Table 17 Summary 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

### 2.3.2 Support provided by the GEF-BSERP to the to facilitate work of BSC operational bodies (Project Steering Committee, Activity Centers and Advisory Groups, etc)

Support has been given to the work of Advisory Groups through project staff and consultants. A survey was undertaken in 2003 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 summary of financial support provided to facilitate the work of the BSC is shown in Table 18 below:

 Table 18
 Distribution of the spendings against Phase 1 Objectives

Objectives	Amount Spent before Jul 2003, \$	Amount Spent after Jul 2003, \$	Percent
Objective 1		\$439 365	16%
Objective 2		\$286 719	10%
Objective 3		\$952 542	34%
Objective 4		\$320 599	11%
Objective 5		\$69 455	2%
Objective 6		\$417 983	15%
Objective 7		\$157 683	6%
Objective 8		\$184 270	7%
Total	\$1 138 051	\$2 828 615	100%

Note: Current management team took over in July 2003. Percent in the last column is calculated from July 2003 onwards.

The mechanism for institutionalizing the BSC 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

<sup>&</sup>lt;sup>6</sup> The contribution of the EC is Euro 36,000 a year. The exchange rate applied is 1Euro = 1.24378 USD.

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. 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 BSC 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.

### 2.3.3 Establishing BSERP Project support structures at national level to facilitate Project implementation

As a management decision directed at improving the situation with the project implementation in mid-2003 an institutional structure of the project has been proposed by the PIU and adopted by a corresponding decision of the Steering Committee Meeting (Sept 2003). Such offices have been established in each of the six Black Sea riparian countries. Project offices support also the institutional structure of the Black Sea Commission.

# 2.3.4 Establishing inter-ministerial coordinating committees to promote policy development and adaptation of national legislation to EU and/or international requirements and for facilitating the implementation of investment projects for nutrient reduction.

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

# 2.3.5 Reinforcing monitoring systems (BSIMAP) for environmental status and water quality control and developing indicators for measuring changes over time in coastal and marine ecosystems

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. 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. 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.

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.

### 2.3.6 Reinforcement of the BSC Information system, tools for cartography, GIS, and reporting mechanisms in linking with the ICPDR (GEF DRP).

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 BSC 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). 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). 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.

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.

### 2.3.7 Developing concepts and mechanisms for public information (communication and education strategies, access to information and public awareness raising)

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. 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. 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.

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.

#### 2.3.8 Reinforcing the role of NGOs through training and education

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. 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 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. 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.

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.

### <u>Indicators SP Objective 3 (Matrix 1 Contributions by country to the BSC, Matrix 2 basin wide monitoring programme and indicators developed/in process)</u>

- (i) Payments of contributions by all contracting parties to the Danube and Istanbul Conventions made for 2000 and 2001 and pledged for the period beyond project duration.
- (ii) Nutrient control, toxics reduction and ecosystem <u>indicators assessing processes</u> in place, stress reduction, and environmental status, are developed, harmonized and adopted for reporting to Secretariat databases by 2006.

### 2.4 Nutrient and Toxics Reduction Plans relevant to application of the EU WFD and/or to ICZM (SP Objective 4)

### 2.4.1 Update of Transboundary Diagnostic Analysis (TDA) and revision of Strategic Action Plan (SAP) including investment programme

When developing the new the TDA, it will be important not to start from the single issue perspective. The analysis should identify all issues that are transboundary in scope. There is a wealth of information and data in the Black Sea region. Prior to developing the TDA, a simple information and data 'stock taking' exercise will be initiated (a meta data study). This will ascertain the sources of information/data, its availability and gaps in knowledge. The transboundary issues will be prioritised and the impacts (both environmental impacts and socio-economic consequences) need to be examined for the priority issues. Further, the immediate causes, underlying sectoral causes and socio-economic pressures, and root causes will be ascertained for the priority issues. In conjunction with this, a detailed governance analysis needs to be carried out that identifies weaknesses in intersectoral policy and institutions. The TDA/SAP process will have strong involvement of local experts from the main stakeholder groups (in the form of a TDA and SAP Technical Task Team). Both the TDA and the SAP needs strong 'buy-in' from the stakeholders and, ultimately, the politicians if they are to succeed. The SAP will be 'locked' to the economic, social and cultural realities of the region. The long-term objectives, targets and interventions need to be realistic. There should be synergy between the long-term ecosystem objectives (EcoQOs), targets and interventions in the Black Sea SAP and those in the Danube and Dnipro River Basin SAPs. Effective Monitoring and Evaluation (M&E) has been increasingly recognised by the GEF as an indispensable tool in project and program management Accordingly, the SAP will include a set of process, stress reduction and environmental status indicators based on the results of the TDA but adapted according to the needs of the long-term EcoQOs and interventions formulated in the SAP. There is also a need

to recognise that National Action Programmes (National SAPs) are an important component of the SAP process.

# 2.4.2 Implementation of the Danube-Black Sea MoU and reinforcement of cooperation with the ICPDR (reporting mechanisms for water quality monitoring and development of coastal zone management concept)

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, BSC 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 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 May 2002. 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 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:

#### **Indicators SP Objective 4**

Countries adopt protocols or annexes to their two conventions and/or develop legally binding "Action Plans" regarding nutrients and toxics reduction commitments as part of their obligations under the GPA for Land-Based Sources of pollution to the Danube/Black Sea basin by 2006,

(i) towards the agreed goal to restore the Sea to 1960's environmental status.

### 2.5 Pilot actions for restoration of D-BS nutrient sink and reduction of non-point source nutrient discharges (SP Objective 6)

### 2.5.1 Implementing research program to assess input of nutrients and hazardous substances into the Black Sea

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. 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 (Sept 2005 and Jan. 2006). 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.

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. 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 DANUBS 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. 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.

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.

### 2.5.2 Reinforcing applied public awareness raising through community based "Small Grant Programs"

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.

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.

#### **Indicators SP Objective 6**

All countries in basin begin nutrient sink restoration and non-point source discharge reduction by 2007 through integrated river sub-basin management of land, water and ecosystems with support from IA's, partners and GEF e.g. through small grants to communities, biodiversity projects for wetlands and flood plain conservation, enforcement by legal authorities and holistic approaches to water quality, quantity and biodiversity of aquatic ecosystems.

#### 3 Perspectives

#### 3.1 Priority Project Intervention in 2004-2007

- Reinforcing institutional and operational mechanisms (revised TDA and SAP) of the BSC to assure nutrient reduction from LBA and protection of marine and coastal ecosystems
- building national capacities for developing policies and regulations for the protection of Black Sea ecosystems and coastal zone management in line with EU directives and/or international conventions
- developing of economic instruments and promotion of investment opportunities (investment program) for pollution control and protection of Black Sea ecosystems
- developing operational systems for monitoring, information management and research under the BSC
- strengthening public participation through access to information stakeholder training and awareness raising
- reinforcing cooperation with other GEF projects (DRP, Dnipro Project, etc) and with IAs to play an proactive part in implementing the GEF Strategic Partnership Program
- developing common indicators and operating a monitoring system (M&E) to evaluate the environmental status of Black Sea ecosystems to demonstrate improvement over time and assess effectives of project intervention.

#### 3.2 Ensuring sustainability of the Project Results

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. 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 Advisory 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 Advisory Groups to improve technical and management capacities for the implementation of nutrient reduction measures identified in the BS-SAP. 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. The application of elements of the European legislation (Common Agricultural Policy, Water Framework Directive, Marine Strategy, etc.) will be considered by other three the Black Sea countries (Georgia, Russia and Ukraine) within the Phase II of BSERP. 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.