

GEF - BLACK SEA ENVIRONMENTAL PROGRAMME

RER/92/G31 - RER/93/G31 - RER/94/G41 - RER/96/006

FINAL REPORT

7 March 1997

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**BLACK SEA ENVIRONMENTAL PROGRAMME
RER/93/G31 - FINAL REPORT**

DRAFT OUTLINE

EXECUTIVE SUMMARY

PART I : BACKGROUND

1. Historical background and development: initial commitment of the BS countries
2. Design of the Programme: development problem and immediate objectives
(incl. Jetric + prepare a table with objectives and achievements / activity)
3. Design of the Programme: institutional organization → a balanced approach for sharing responsibilities and actions among 6 countries.
(incl. Schema of inst. Arrangements with Steering Committee, etc.)
4. Management of the Programme: Implementation and Execution
Programme Funding and evaluation

Emphasizing: identification of the problem/s (PA phase) and approach taken to address it/them

PART II: INPUTS

1. GEF funding + budget management and analysis
2. PCU staff - cost-effectiveness, team leader, etc.
3. Extensive use of BS contracts combined with chosen and selective international expertise
4. Government inputs and backing / BS stakeholders (recipient of BSEP TA)
5. Three agencies in partnership
6. Additional and parallel support

PART III: OUTPUTS AND RESULTS

1. Thematic results:

- 1.1. Pollution Monitoring
Data collection
Monitoring system in place (coherent, measurable, systematic and harmonized)
Pilot studies
LBS and Hot Spot surveys
- 1.2. Biodiversity
National and regional assessments + Bio. Investment Plan
Marine Mammals WG
- 1.3. Fisheries
Stock assessment efforts for sustainable management of the resources
Emphasis on Aquaculture as viable option for sustainable development
- 1.4. ICZM ICZM national networks, boundaries, nat. reports, reg. report and pilot projects
Tourism initiative
- 1.5. Emergency Response: ?

Emphasizing: - the factors that significantly facilitated or impeded the outputs, in particular.: the efforts of BSEP to generate additional \$ contribution as well as induce Government's interest

and support; the effectiveness of the networks; BSEP success in facilitating exchange of info/experience with other prog. when possible (ER, ICZM), etc. but also changing political situation; communication problems, etc.

2. Capacity building

- 2.1. Equipping the laboratories and institutions
- 2.2. Regional co-operation: networks established with communication facilities + support to WP meetings
- 2.3. National Co-operation: coordination at national level not much improved ?
- 2.4. Data management tools provided (GIS, BlackSIS)
- 2.5. Training:
 - formal training: No. of events both in the BS region and outside
 - in-service training: incl. Contracts with institutions./consultants from the BS region with methodology developed in consultation with international experts
- 2.6. P/A and P/P
(incl. BSEP publications & newsletters; NGO small grants and network; internet connection; film;...)
- 2.7. Legislation
- 2.8. Establishment of BS Commission and Secretariat (?)

Emphasizing:

- effort of harmonization and consistency
- both policy and grass-roots activities
- training mainly undertaken in the region using regional facilities and expertise
- "image" created

3. Generating investments

- 3.1. Economic instruments
- 3.2. Regional Environmental Fund
- 3.3. BSEPS → Portfolio (pending ?)
- 3.4. UIP
- 3.5. Biodiversity Investment Plan

Emphasizing:

- key role of the WB (obscure one of EBRD ?)
- innovative solutions proposed

PART IV: DEVELOPING THE BSAP: Process and product

Emphasizing:

- consultation process (incl. NGOs)
- pulling the best resources and expertise from the region

PART V: LESSONS LEARNED / FOLLOW-UP AND RECOMMENDATIONS

ANNEXES

EXECUTIVE SUMMARY

This is the final report for the Black Sea Environmental Programme. It combines final reporting requirements for RER/92/G31 - Preparatory Assistance to the Environmental Management and Protection of the Black Sea, RER/93/G31 - Environmental Management and Protection of the Black Sea, RER/95/G41 - Development of a self-sustaining Mechanism to Ensure the Environmental Management of the Black Sea, and RER/96/006 - Formulation of the Black Sea Strategic Action Plan.

The purpose of the Programme was to strengthen and create regional capacities for managing the Black Sea ecosystem, develop an appropriate policy and legislative framework for the assessment, control and prevention of pollution and the maintenance and enhancement of biodiversity, and facilitate the preparation of sound environmental investments. The Programme was implemented by the United National Development Programme (UNDP) and executed by the United Nations Office for Project Services (UNOPS). The Programme was to establish the necessary scientific, institutional and policy framework for the design and preparation of a Black Sea Strategic Action Plan.

The Programme achieved the following results:

- Black Sea technical networks were established in the thematic areas of : emergency response, pollution monitoring, biodiversity, integrated coastal zone management, fisheries and corresponding activity institutions strengthened to become regional centres of competence in their respective area.
- Reference laboratories were fully equipped with modern and up-to-date instrumentation; and pilot and routine pollution monitoring activities were carried out.
- Formal and on-the-job training to some 500 experts was provided, inter alia in: the use and installation of equipment, the identification of issues and the development of appropriate strategies to address them, assessment methodologies and the management of assistance projects.
- Data management and information tools were developed, public awareness materials produced and disseminated.
- A network for exchange of experience and integration and streamlining of efforts among Black Sea non governmental organizations was established.
- A total of 88 national and regional thematic assessments were produced, fueling into the preparation of the Black Sea Strategic Action Plan.
- A technical Transboundary Diagnostic Analysis was prepared, as the groundwork for the Black Sea Strategic Action Plan.
- A Black Sea Strategic Action Plan was developed and signed by the ministers of the environment of the six Black Sea countries (RER/96/006)
- A portfolio of urgent priority investments was identified and six selected pre-feasibility studies were implemented.
- Development of innovative financial mechanisms to sustain environmental management of the Black Sea.

In addition, the Programme facilitated the following results:

- Increased and coordinated donor support to the region. The Programme demonstrated how to generate donors contribution to enhance the value of GEF investment.

- Enhanced regional and national cooperation in-between the Black Sea countries and among the different sectors of the countries.
- Establishment of a strong and integrated management of the Programme with an effective Programme Steering Committee channeling the inputs of the countries, the donor communities and the GEF partners.
- Involvement, on a regional basis, of UNDP Country Offices in the implementation of components of the Programme and cooperation with GEF-NGO Small Grants Programme and UNDP Country Offices for support to the countries in the area of environmental management.
- Coordination of the specialized inputs of the UN agencies, the World Bank, the private sector, research institutes and NGOs into the implementation of activities.

The Black Sea countries expressed early on their appreciation with the implementation of this Programme. They requested and fully supported the development of a second phase, which is ongoing at present. The institutional learning of the Programme will help focus the second phase on these priority areas, such as the need for: a basin-wide policy umbrella, specific investment projects generated through a coordinated donor approach, and enhanced public participation.

INTRODUCTION

The present Final Report presents achievements and results of the Black Sea Environmental Programme (thereafter referred to as the Programme or the BSEP), as implemented through four individual projects. Because the projects are mutually supportive and were designed to address the same longer term development problem within a build-in institutional and policy framework, it was decided to combine the presentation of all projects into one final report. This report then covers the following projects:

<i>Project No.</i>	<i>Project Title</i>	<i>Source of Fund</i>	<i>Approved Budget</i>	<i>Years of impl.</i>
RER/92/G31	Preparatory Assistance Project	GEF	\$488,000	1992-93
RER/93/G31	Environmental Management and Protection of the Black Sea	GEF	\$8,812,000	1993-96
RER/95/G41	Development of a Self-Sustaining Mechanism to Ensure the Environmental Management of the Black Sea	GEF Bloc B	\$49,000	1995
RER/96/006	Formulation of the Black Sea Strategic Action Plan	UNDP IPF	\$194,761	1996

A number of substantive documents reviewing the progress and outputs of the BSEP have already been prepared and published. These proved to be excellent background materials for this final report and may be consulted in parallel to the reading of this document. These include:

- BSEP Annual Report 1994 published by the BSEP-PCU¹
- BSEP Annual Report 1995 published by the BSEP-PCU
- BSEP Annual Report 1996 (draft) published by the BSEP-PCU
- Project Evaluation Report RER/93/G31 of 20 November 1995
- Project Evaluation Report RER/93/G31 (update) of 4 February 1997 (thereafter referred to as "Update of the Evaluation")

This final report, by no means, wishes to repeat the conclusions and findings of these reports, but rather builds upon them and attempts to present the results of the BSEP in a coherent way, i.e. stating the immediate problems the Programme was intended to address and the logic of its approach to addressing them (in terms of inputs sought and used, strategy and methodology developed and implemented and outputs produced). The document also presents financial statements of all four projects and analytically introduce the management of the project as per the sources of funds used. Finally, the report draws lessons learned from the implementation of the Programme and propose recommendations for consideration when developing follow-up projects.

¹ BSEP-PCU stands for the Black Sea Environmental Programme - Programme Coordination Unit or PCU, based in Istanbul, Turkey.

PART I BACKGROUND and OVERVIEW

1.1 Initial commitment of the Black Sea countries

The BSEP started with an initial commitment of the Black Sea countries. Faced with a rapidly deteriorating water quality and environment, the six Black Sea coastal countries decided to act in concert to revert this degradation. Inspired by the Regional Seas Conventions which emerged after the 1972 Stockholm Conference on Environment and Development, representatives of the Black Sea countries drafted their own “Convention for the Protection of the Black Sea Against Pollution” (the Bucharest Convention), with technical advice provided by preliminary missions of UN specialized agencies. The convention was signed in Bucharest in April 1992 and ratified by all six legislative assemblies by early 1994. The Bucharest Convention includes a basic framework of agreement and three specific Protocols on: the control of land-based sources of pollution; dumping of waste, and: joint action in the case of accidents (such as oil spills). Under the auspices of UNEP, which hosted a meeting of technical expert to discuss the final draft of the declaration, a Ministerial Declaration was signed in Odessa in 1993 (the Odessa Ministerial Declaration) in an effort to provide guidelines for policy and concrete actions, that would complement the Bucharest Convention.

The recent political changes within the region favorably credited the initiative and created an unprecedented opportunity for joint action at the regional and international level. Building upon this momentum, a request was presented to the GEF to financially support a programme of assistance for the Black Sea, through the creation of the Black Sea Environmental Programme (BSEP). This programme was signed on 29 June 1993 for \$9.3 million for three years, of which some \$500,000 was earmarked for preparatory activities.

1.2 Design of the Programme: Development objective and immediate objectives

The overall development objective of the Programme was stated as: “Restoration of the Black Sea ecosystem and protection of all its natural resources”², a theme of Chapter 17 of Agenda 21 of the United Nations Conference on Environment and Development³. The Programme was the first regional programme to be based upon this document.

The immediate objectives of the Programme together with corresponding success criteria were agreed at the June 1993 initial meeting of representatives of the Black Sea governments (thereafter named the BSEP first Steering Committee meeting) and expressly stated in the Project Document RER/93/G31. These were to:

	Immediate Objectives	Actions/ Output	Expected end-of-project situation / Principal Determination of Achievements
1	Strengthen and create regional capacities for managing the Black Sea ecosystem	6/11	Training programmes for capacity building, human resources development and environmentally sound investment policies implemented/ - Full implementation of Bucharest Conv. and Odessa Declaration - Technical reports received from each of the working groups - At least one institution per country contributing to regional assessment - Official adoption of contingency plan - External review of the implementation of individual projects - Monitoring outputs/poling public opinion

² Revised Project Document RER/93/G31 of October 1995, page 16.

³ United Nations Conference on Environment and Development, Rio de Janeiro, June 1992

2	Develop an appropriate policy and legislative framework for the assessment, control and prevention of pollution and maintenance and enhancement of biodiversity	7/12	Support systems established for implementing the recently adopted Bucharest Convention and Ministerial Declaration when adopted & preparation and adoption of the BS-SAP / - Signature of Odessa Declaration - Preparation and adoption of BS-SAP - Strategy developed for rehabilitation and sustainable development of shared and straddling natural resources - Completion of triennial status and trend report of Odessa Decl., its public diffusion and review
3	Facilitate the preparation of sound environmental investments	6/8	A list of urgent investment ready and partly implemented / - Portfolio of urgent investment accepted - Financial support to pre-investment studies by major donors - Adoption of a priority investment plan (as a component of the BSAP) and biodiversity & fisheries investment plans. - Publication of EIA case studies -Promotion of transfer of appropriate technologies

The immediate objectives of the programme are far-ranging, going beyond mere biological and natural resources management and are closely related to and dependent upon the political and economic context of the region. Attaining these objectives pre-supposed that:

- regional (Black Sea) co-operation (embryonic at the start of the programme) would develop and prevail in the medium to long term;
- international co-operation with and technical/financial support to the Black Sea region would increase; co-operation among donors would be enhanced;
- inter-sectoral consultation and co-operation would take place within the countries;
- consultation among the different society's stakeholders would effectively take place within the countries;
- financing from domestic (and foreign sources) would be maintained and/or secured.

This ambitious programme was highly dependent upon a concerted action, joint efforts and adequate financing both from domestic and foreign sources.

1.3 Design of the Programme: institutional set-up

To address such a complex and ambitious goal, the Programme was institutionally designed in an innovative way, centered around a Programme Co-ordination Unit. The programme relied upon:

a network of Activity Centers and corresponding Focal Point institutions in each of the other 5 countries. These Activity Centers would become center of competence in their respective area. The approach follows the principle that responsibility for the management of the Black Sea is to be shared among the riparian countries; therefore, actions and activities should be similarly shared in a balanced way among the countries. This institutional network (see Annex 1), though complex, time-consuming and demanding to manage, was successful in ensuring the involvement of a great number of experts from all six Black Sea countries and in attributing a specific leading responsibility to each of the countries. Each Activity Center and its corresponding Focal Point institutions form a working group. Three additional working groups are operational and based at the BSEP-PCU. These are the working groups on Data Management and GIS, Environmental Economics, and the Advisory Panel on the Harmonization of Environmental Quality Criteria, Standards, Legislation and Enforcement. Finally the BSEP-PCU is coordinating activities to strengthen the capacities of non-governmental organizations (NGOs) in the Black Sea to become more active in the design of environmental management programmes and policies.

<i>Activity Centers</i>	<i>Location</i>
Emergency Response	Varna, Bulgaria
Routine Pollution Monitoring (monitoring)	Istanbul, Turkey
Special Pollution Monitoring (control)	Odessa, Ukraine
Protection of Biodiversity	Batumi, Georgia
Development of Common Methodology for Integrated Coastal Zone management	Krasnodar, Russian Federation
Fisheries	Constanta, Romania

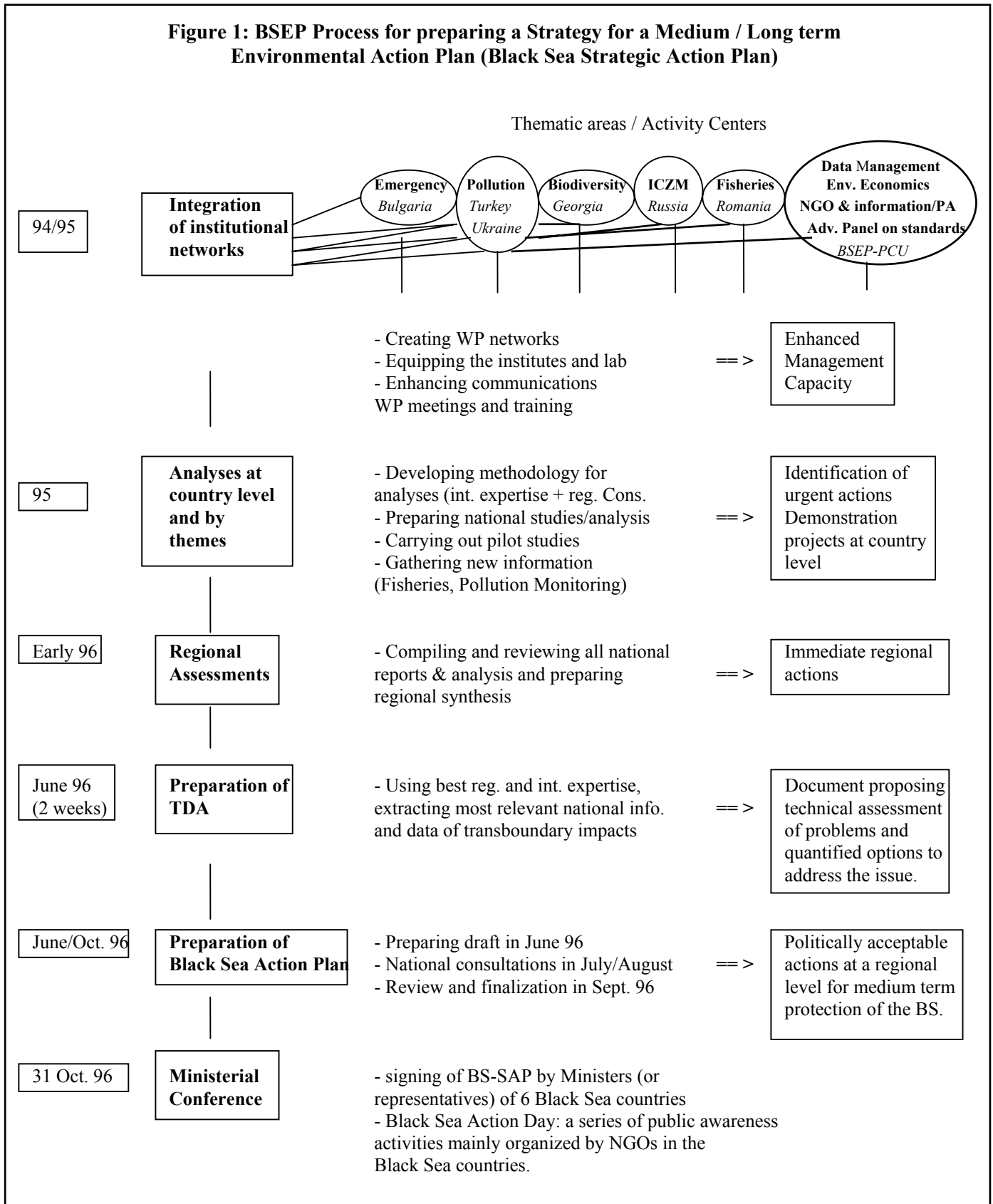
a rigorous approach towards the production of the outputs. The “stringent logic that is typical of the Programme as a whole⁴” and through which the Black Sea Strategic Action Plan (BS-SAP) was derived at was consistently followed throughout the implementation of the Programme and across the various thematic areas. The whole work of the BSEP moved rigorously towards the ultimate objective, i.e. the preparation of the BS- SAP, in a coherent and progressive fashion. The figure (Figure 1) on the previous page illustrates this process and section III.1 of this report explains, by taking each thematic area as example, the driving strategy of the Programme.

a central role for the Programme Coordination Unit (PCU). Instead of sub-contracting major components of the Programme (as a clearing house), the BSEP-PCU, located in Istanbul, Turkey, opted to carry out itself the design, organization and implementation of a wide range of small activities (training, meeting, preparation of reports and studies, data collection, pilot projects, etc.). This necessitated a considerable investment in time and dedication on the part of the project staff members, but enabled the BSEP-PCU to 1) effectively drive the whole process and control each step of the strategy and 2) make extensive use of regional and local consultants (through the issue of small contracts), thereby enhancing the ownership of the Programme by the Black Sea countries.

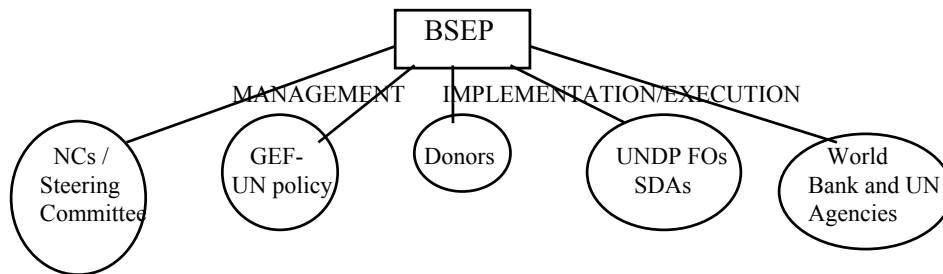
a service-oriented, catalytic approach. The BSEP-PCU helped coordinate donor support and provided guidance for the preparation of terms of reference, the drafting of project documents and the design of donor strategy for assistance to the region. This proved very valuable for mobilizing parallel financing and harmonizing donor assistance and also helped forged confidence within the region that the PCU was a trust-worthy service center for the Black Sea countries.

⁴ Project Evaluation Report, 20 November 1995, page 8

Figure 1: BSEP Process for preparing a Strategy for a Medium / Long term Environmental Action Plan (Black Sea Strategic Action Plan)



a stool resting on 6 pillars: National Co-ordinators and Steering Committee advice, GEF and UN policy guidance, UNOPS administrative support, donor support, SDAs and World Bank /UN specialized agencies backing.



The BSEP operates on the basis of management from the region. As such, it relies upon the guidance provided by the countries at the Steering Committee meetings (yearly meetings) and through frequent consultations between the PCU and the National Co-ordinators. The direct and informal line of communication between the National Co-ordinators' offices and the PCU enabled a smooth and constructive dialogue, necessary to a successful implementation of the wide range of activities in the short time period allotted.

The BSEP also operated through the policy and administrative structure of the UN. UNDP, as implementing agency, monitored the policy aspects of the Programme and relayed the changing directives it received from the GEF Secretariat. UNDP also played a critical role in ensuring that the Black Sea Strategic Action Plan would be finalized when it agreed to fund a 3-month bridging project (RER/96/006) at the end of June 1996 when GEF funding ceased.

UNOPS, as executing agency, was responsible for the day-to-day administration of the Programme. It facilitated the recruitment of long-term and short-term personnel, provided the necessary administrative support in terms of finalizing contracts, preparing budget revisions, and authorizing payments and advances to the Programme's Imprest Account. It organized the international procurement and delivery of equipment (instrumentation and communication equipment) and negotiating financial terms and conditions of major Inter-Agency Agreements with the World Bank and UN agencies.

To carry out the implementation of the activities, the Programme relied on the technical expertise of the World Bank and the UN specialized agencies (FAO, WHO, WTO, UNESCO-IOC, UNEP, IMO, IAEA - see attached Glossary of acronyms). The World Bank played a particular influential role in the Programme, not only because it was responsible for the implementation of over 30% of the Programme (\$2,975,000 from the latest budget revision), but chiefly because its association with the BSEP enhanced the credibility of the Programme as a whole. The World Bank acted as a representative of and a link to International Financing Institutions and thereby a guarantee that Black Sea investment plans and feasibility studies would be submitted for consideration to those institutions, thus validating, in the eyes of the Black Sea countries, the effort to undertake such plans in the first place. Finally, the World Bank's technical reputation and its network of Field Offices had the potential to reach out to those government sectors, like the Finance and Budget ministries, able to support domestic efforts for environmental management. More effective actions could have been undertaken there to capitalize on the World Bank influence in those decision-making ministries and gain broader national support for the Programme. During the time frame of the Programme, this reaching effort could only be limited.

Central to the implementation of the BSEP has been the support of the donor community to implement parallel and supporting activities. Within the framework of the BSEP, donors have channeled some US\$5.8 million to the region for Black Sea environmental management activities. A key partner, the European Union, through the Phare and Tacis programmes, has provided support to activities of the working parties from the start of the programme up till the end of the century. It also came to the rescue of the PCU to cover the second bridging period in 1996 when GEF and UNDP funding was unavailable.

Finally within UNDP, the UN Field Offices, and particularly the newly appointed Sustainable Development Officers (SDAs), have played an increasing role in programme implementation, not only in administrative back stopping and monitoring but also in the provision of technical inputs and in facilitating consultations at the national level. SDAs, for example, were partners in the national discussions related to the proposed development of a Regional Environmental Fund, participated in the BS-SAP process and were actively involved in the preparation of the Black Sea Action Day.

A full account of the institutional and organizational set-up of the Programme is included in the BSEP manuals⁵. For ease of reference, the relevant extract is attached in Annex 1.

1.4 Expected end-of-project results.

The present report will review in detail the results of the programme and, in the following sections, show that:

- a strong institutional and scientific basis for implementing environmental policies has been built
- networks are functioning
- the location of main sources of pollution have been identified and their impact quantified (when possible)
- training facilities are available and,
- a list of urgent investments has been prepared and partly implemented.

The project document makes reference to tangible results such as “improvement in the water quality of the Black Sea and the discharges of rivers...identification of critical habitats and introduction of measures to protect them”⁶ as indicators of achievement of the Programme’s objectives. Clearly the scope of the Programme itself (calling for an enhancement of the managerial capacities of the countries to address environmental issues) as well as the aspects of the Black Sea ecosystem recovery process makes it very unlikely that such results can be witnessed within the lifetime of the project. In fact, Dr. Laurence Mee, Coordinator of the BSEP, spells out in the introduction of the Annual Report 1996 that:

“The slight recovery of some shelf ecosystems and of the Turkish anchovy fisheries is, most probably, more a result of decreasing economic activity (particularly the decrease use of agrochemical) than of the protective measures taken by Black Sea basin countries. On the other hand, the economic decline also leads to poorly operating waste-water treatment systems and increased human-health hazards for bathers and beach-lovers.... The small respite in the pressure from some pollutants on the environment can be put to good use, thus offering a small window of opportunity to implement some more effective protective measures than those which

⁵ GEF-BSEP Manuals for 1994, 1995 and 1996.

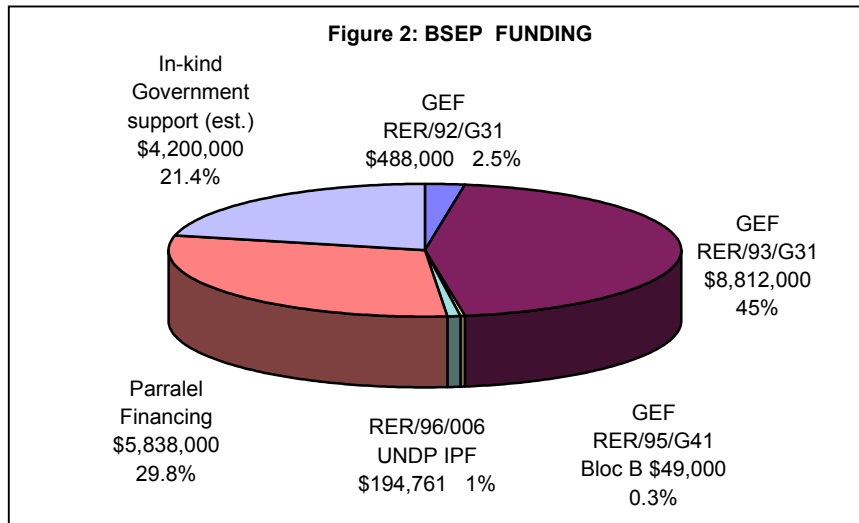
⁶ Project Document RER/93/G31 page 9

led to the earlier environmental catastrophe. The BS-SAP is all about such policy changes.”

1.5 Programme funding

Taking into consideration all parallel financing as well as the Governments’ estimated in-kind input, the total funding for the Programme is divided as follows:

BLACK SEA ENVIRONMENTAL PROGRAMME TOTAL FUNDING		
GEF RER/92/G31	GEF	\$488,000
GEF RER/93/G31	GEF	\$8,812,000
GEF RER/95/G41	GEF Bloc B	\$49,000
RER/96/006	UNDP IPF	<u>\$194,761</u>
Sub-total		\$9,543,761
Parallel Financing		\$5,838,000
In-kind Government support (est.)		\$4,200,000
TOTAL		<u>\$19,580,761</u>



It is important to emphasize that funding from the GEF played an instrumental catalytic role in securing additional contribution and gaining continuous support from the government. The Project Evaluation Report notes that “the role of GEF partners and UN specialized Agencies is crucial in the whole programme. The support of GEF seems to be a prerequisite for any action in the region”. Similarly, the Final Report of the Danube River Basin⁷ draws a conclusion which may equally apply to the BSEP: “GEF has proven its worth as an important financing mechanism, capable of initiating processes which allow countries to increase their environmental awareness and give environmental issues higher importance in the national planning process, including allocation of national financial resources”. That \$9.3 million of GEF funding (plus \$0.2 of UNDP IPF contribution) was able to mobilize over that same amount in parallel financing (donors plus in-kind government inputs) points to the effectiveness of the Fund as a catalyst for securing the

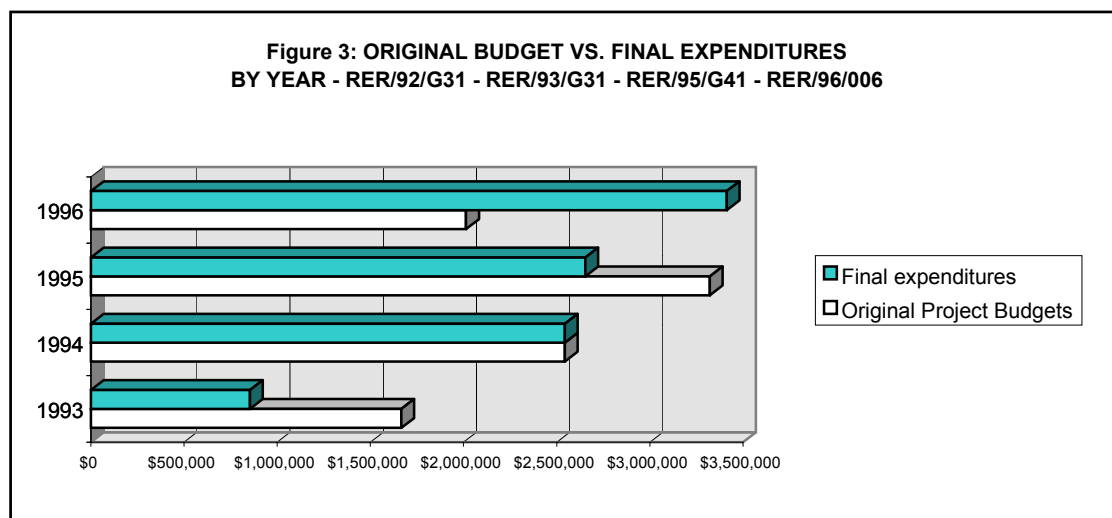
⁷ Final Report, RER/91/G31 - Environmental Management in the Danube River Basin, Draft January 97

necessary investments as well as to the success of this Programme in mobilizing additional funding.

PART II INPUTS

2.1 GEF funding

A detailed financial analysis of the project forms Part V of this report. The present paragraph and following figure (Figure 3) serve to show the composition of the budget and its distribution across the years from the original project budgets to the final expenditures⁸ and also highlight some of the key elements of financial management of this Programme. A table is attached in Annex 2 detailing the distribution, for the four projects combined, of the original budgets per year and the final (or semi-final) expenditures.



Final expenditures are distributed across the years similarly to the original budget, with the difference that 1996 final expenditures are much higher than originally planned. This is essentially because BSEP activities, initiated in 1993-94, culminated in 1995 and 1996. Also the World Bank Inter-Agency Agreement (IAA) disbursements were lower than anticipated in the first three years and are expected to pick up in 1996, with much of the Urgent Investment Portfolio obligations being disbursed. The last two years of the Programme, 1995 and 1996, which can be considered as the time of full operation of the PCU (the full staffing of the PCU came on board only in early to mid-94), account for 64% of the overall Programme, against 56% originally budgeted.

Financially managing the Programme has been nothing but a challenge. The complexity of the operation stems from the following elements:

(1) *The original GEF Programme was split between RER/92/G31 (the PA phase) and RER/93/G31. The workable amount available under the full phase proved difficult to estimate.*

(2) *Support costs arrangements were re-negotiated several times during the lifetime of the Programme, from a 6% original rate up to an 8% average rate across the full life of the*

⁸ Final expenditures for the whole BSEP are estimates only derived from real expenditures monitored by the BSEP-PCU. Final expenditures from UNOPS accounting system will only be available at the end of 1997 when reporting of all expenses and IAAs disbursements will have been recorded.

Programme⁹. That increase in support costs (an amount of \$236,854) together with the prolonged uncertainty as to its final rate made it difficult for the BSEP to develop longer term plans for its proposed activities as well as to prepare accurate budget revision for the Programme.

(3) *UNOPS budgetary system is principally based on management by budget categories* and is not conceived to adequately reflect expenditures by thematic areas or activities. The expenditures related to an activity which would entail the recruitment of one international consultant, the granting of two small regional contracts, and the organization of one workshop would be spread over at least three different budget lines, this making it extremely complicated to monitor afterwards the overall cost of the activity.

(4) *UNOPS budgetary system works by obligated amounts* which are then debited by the real expenditure figures when these are recorded in the system. The latter can take at least three months and closing an obligation would take a whole budgetary year. As a result, UNOPS accounting *does not operate in real costs* but in obligated, i.e. requested, amounts. Since the requested amounts are usually very conservative and higher than the planned expenditure, year-end final expenditures reported by UNOPS differ substantially from the BSEP-PCU own records of real expenditures. As an example, 1995 UNOPS reported figures for BSEP-PCU implemented activities (i.e. excluding activities implemented by the World Bank and UN agencies, and PCU personnel costs) were 15% higher than PCU-recorded real expenditures. Monitoring exact expenditures with a view to better planning for future activities was then rendered somewhat difficult. It is worth pointing out that, throughout the implementation of the Programme, the BSEP-PCU kept its own records of real expenditures, while reconciling its figures with UNOPS for budgetary revisions. This very-time consuming and cumbersome tasks enabled the PCU to achieve a real implementation rate of virtually 100% on combined RER/92/G31 - RER/93/G31, i.e. total estimated final expenditures of \$9,264,017 versus a total budget of \$9,300,000.

(5) *Financial reporting from the World Bank and the UN implementing agencies has been poor.* Detailed updated figures for expenditures incurred by the organizations were not provided. Lumpsum figures against IAAs were only made known, once yearly budget revisions were prepared and agencies reported their total spending.

The above elements serve to introduce the discussion on the financial management of the Programme, which will be detailed and reviewed in part V.

2.2 PCU staffing

In its full operation, the BSEP-PCU was composed of 11 to 12 staff members:

<i>Title</i>	<i>Disciplines</i>	<i>Dates</i>	<i>Status</i>
Coordinator	marine chemistry/ env. man.	09/93	- Int. staff
Information officer	marine biology	ongoing	Int. staff
Environmental Economist	economics	11/93	- Int. staff
Institutional Dev. officer	instit. Dev./ env. man.	ongoing	Int. staff
Fisheries officer	fisheries	01/94 - 8/96	Int. staff
Assistant for legal matters *	law	04/94 - 9/96	Int. staff
Assistant for PA & publication *	communication	05/95 - 5/97 05/95- 12/95 1/96 - 4/96	Int. staff
Executive secretary	multi	01/94 - 6/96	Local

⁹ Support costs rate were: 6% for RER/92/G31 and 11% in 1993, 9% in 1994 and 95 and 7% in 1996 for RER/93/G31.

Editorial assistant	multi	01/94 -	staff
Accountant	multi	06/94 -	Local
Administration assistant	multi	01/94 -	staff
Driver	multi	06/94 -	Local
			staff
			Local
			staff
			Local
			staff

* temporary staff

The Project Evaluation Report commends on the staffing of the PCU remarking that “the PCU staff was forged into a strong unified workforce with neatly specified tasks but also a strong sense of internal cooperation and camaraderie”. That same report concludes its evaluation by congratulating “the team of young, dynamic, competent people for a job well done”¹⁰.

Notwithstanding its achievements, it is regrettable that the BSEP-PCU did not include Black Sea experts in its structure. Towards the end of the Programme, arrangements were being made to have Black Sea NGO representatives field the position of Institutional Development officer (renamed Public Participation officer) on a rotational basis and funded through Programme funds and/or donor support. Though the Project Document for RER/93/G31 clearly “invites [Governments of the region] to nominate and funds candidates for additional posts as counterpart experts”¹¹, this did not happen, chiefly because of lack of funding from the Black Sea governments and lack of encouragement therefor.

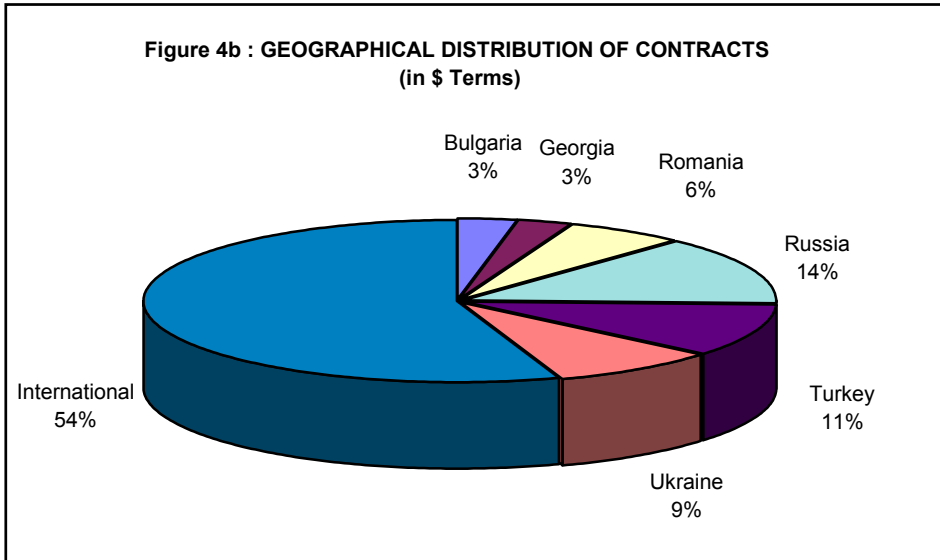
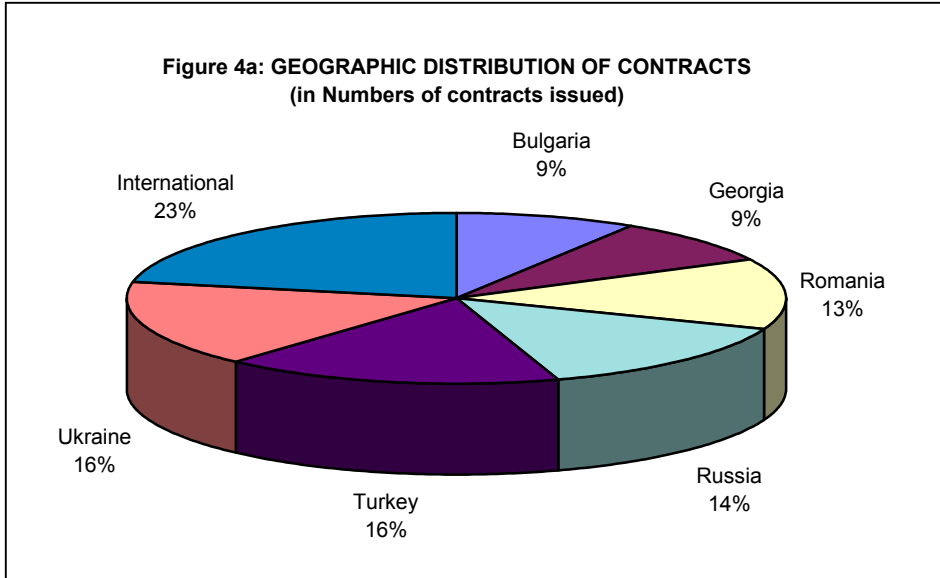
Compared with the arrangements of the original Project Document, the PCU benefited from two additional full-time staff members, an institutional development officer and a fisheries officer, thanks to, respectively, a cost sharing contribution from the French Government and provision of a Junior Professional Officer from the Japanese Government. The BSEP-PCU also made use of temporary trainees, young professionals contracted at a low cost for a short-term focused assignment.

2.3 Technical expertise: use of Black Sea experts and international specialists.

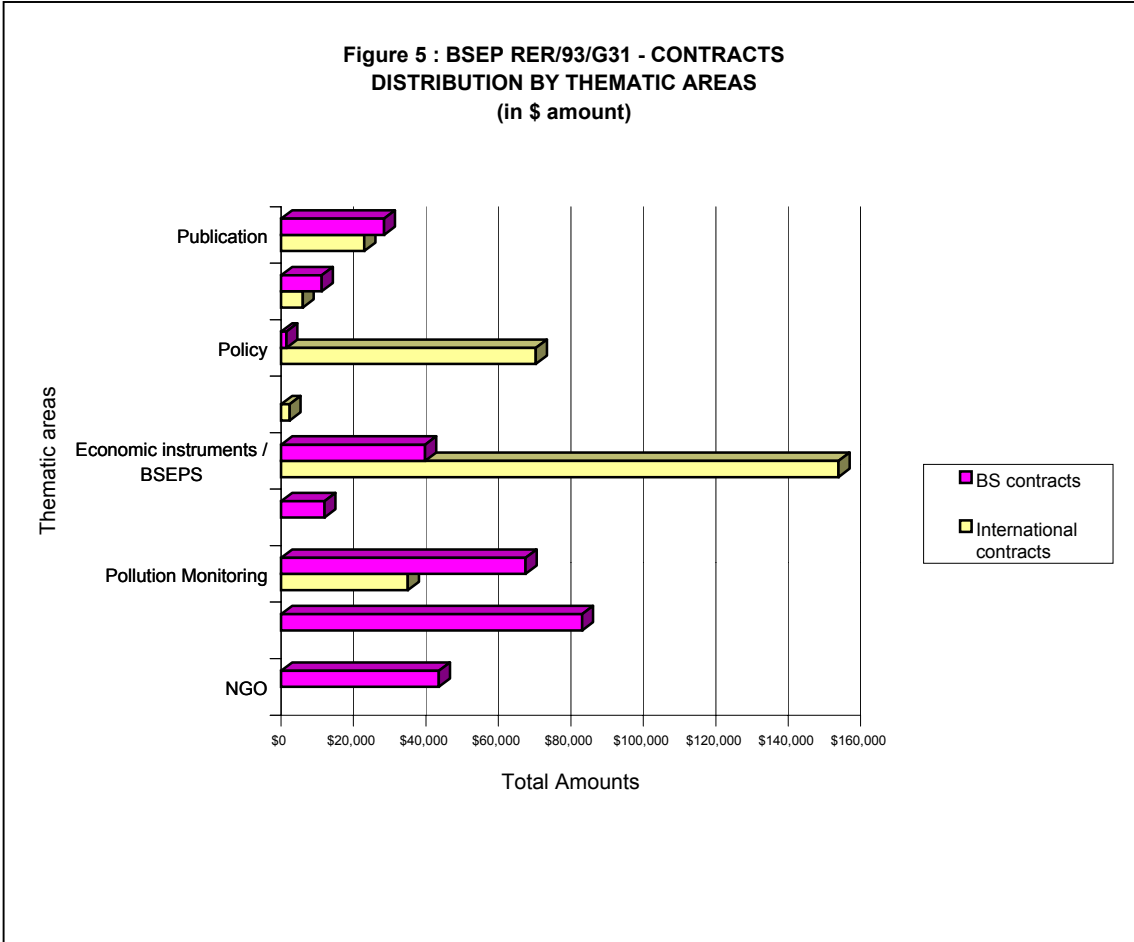
The Programme made extensive use of regional expertise, contracting altogether some 65 institutions and experts from the region (out of a total of 85 contracts), either through small contract procedure or through recruitment of consultants under national project personnel service contracts (NPPP). The figures below show that the geographic distribution of contracts is rather homogeneous among the Black Sea countries, with a little more demand on Russia, Turkey and Ukraine, respectively because the GIS effort was headquartered at Moscow State University, Russia, pollution monitoring activities were headed from Odessa in Ukraine and most of the BSEP-PCU publication and edition was contracted to local companies in Turkey.

¹⁰ Project Evaluation Report, page 6 and page 26.

¹¹ Revised Project Document page 13.



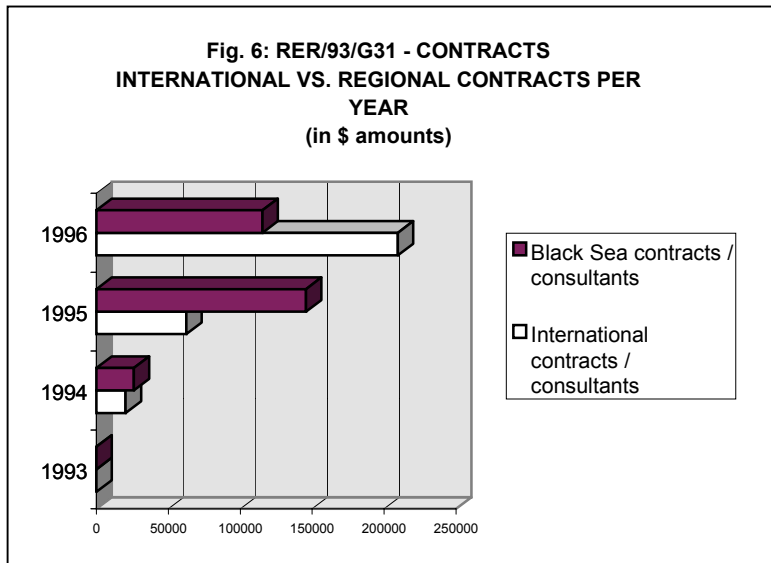
To implement the strategy throughout the thematic areas of the Programme, the BSEP made use of a combination of local/regional experts and of international specialists who would assist in the design of the methodology, the preparation of pilot studies and the training efforts. The following diagram further details the distribution of contracts per thematic areas of the Programme. Essentially, international experts were used in areas where experience of similar programmes proved to be a valuable additional resources to the region, i.e: review of legislation, design of the Action Plan and preparation of the BSEPS.



The BSEP-PCU increased its use of Black Sea and international contracts as a project implementation tool over the period. This reflects the higher need of the Programme for contracted services and the concentration of BSEP activities in those two years of full operations, 1995 - 1996.

Contracting experts (in particular from the region) was a long and laborious process, whether for a \$500 contract or a \$30,000 one.

The machinery for issuing contracts and monitoring its finalization, signature and payment can be extremely cumbersome.



Finally an analysis of the table of contracts in Annex 3 evidences that contracts were awarded to a wide range of organizations, including research institutes, universities, individual consultants and private companies, as well as non-governmental organizations:

Research institute and government agencies	23%
Universities	30%
Individual consultants / private companies	23%
NGOs	24%

Distribution of Regional Contracts RER/92-93/G31 (in \$ amounts)

The BSEP-PCU made use of its extensive networks of regional experts and issued a great number of contracts to the Black Sea technicians and scientists to contribute to the research and study effort of the Programme. Though this approach stretched the workload of the whole staff of the PCU to the limits, this enabled 1) the networks to survive and thrive, 2) the expertise from the region to be tapped and effectively channeled to the BSEP and 3) the BSEP to rely on some 900 “friends” in the scientific, bureaucratic and non-governmental communities of the Black Sea countries for support and prompt delivery of services. This, combined with selective international expertise (also contracting through the facilities of the UN specialized agencies), contributed largely to the design and development of the BS-SAP.

2.4 Three agencies in partnership

The GEF is a trust fund managed by three parties: the UNDP, the UNEP and the World Bank. Each of these agencies played a critical role in the guidance and implementation of the programme.

UNEP was unable to use the \$25,000 IAA earmarked at the start of the Programme and the Agreement was subsequently canceled, for no activity had taken place. The Project Evaluation Report noted that “it is evident that UNEP’s role is too weak as an environmental agency and should be strengthened in the future¹²”. The Update of the Evaluation further reaffirms that “the participation of UNEP’s Water Branch was minimal due to their own lack of funding” but then adds that “the UNEP GEF International Waters Coordinator took an active interest in the programme and provided considerable personal expertise in the BS-SAP process¹³”. Indeed, even though the organization was unable to provide substantial support to the Programme as a whole, because of general funding difficulties, its representatives participated actively in some BSEP activities, in particular the preparation of the BS-SAP, and provided expertise in those areas where UNEP hold comparative advantage.

UNDP worked closely with the BSEP-PCU via the GEF coordinator at the Regional Bureau for Europe and the CIS and maintained a very active dialogue with the BSEP in the area of policy development, GEF strategy and the design of a follow-up programme. UNDP showed genuine interest in the implementation of the Programme and was well represented in activities and Steering Committee meetings. Finally, as noted earlier, UNDP was instrumental in ensuring the continuity at the PCU by funding a 3-month bridging project, RER/96/006.

The World Bank, in this Programme, was not only one of the GEF partners, but was also entrusted with the implementation of a key component of the BSEP (essentially immediate objective 3). Its role as a partner in the implementation of the Programme has been discussed

¹² Project Evaluation Report page 11

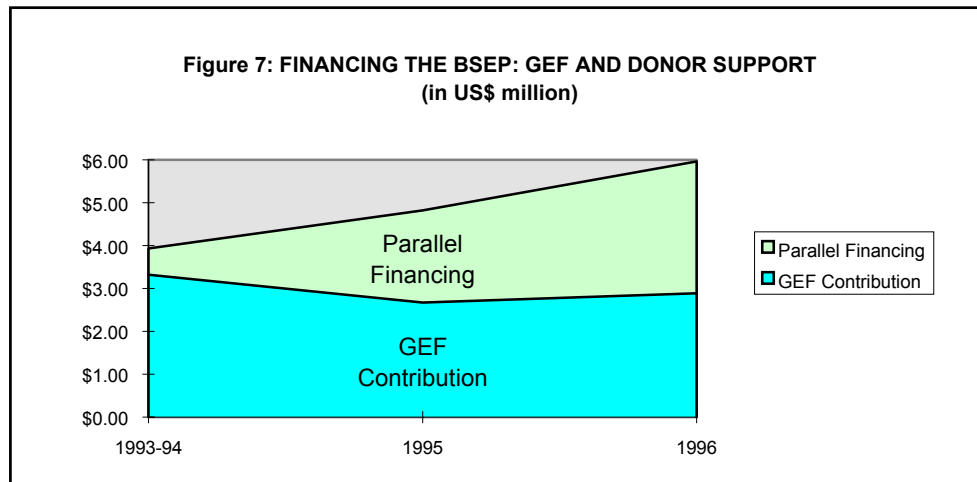
¹³ Update of the Project Evaluation Report page 3.

above. As a GEF partner, the Bank has been very supportive of BSEP activities, “pledging to continue its support for BSEP in several ways, [which may include]: participation in the SAP process, financing specific Black Sea related investments, initiating country program discussions on sectoral and macro-economic policy issues and coordinating donors support¹⁴”. It has consistently supported the design of a second phase of the Programme and has commented with appreciation on the policy initiatives of the BSEP-PCU.

2.5 Parallel support from the donor community

The donor community was instrumental in enabling the implementation of parallel activities, thereby strengthening the efforts of the BSEP. Associated partners made use of the BSEP networks and favorably welcomed launching activities within the framework of the BSEP. In fact, terms of reference for these projects were often prepared in close consultation with the BSEP-PCU and, as a result, parallel projects became intrinsically associated with core BSEP activities.

In total, some \$5.8 million was mobilized in parallel financing. Contributions from associated partners increased over the life of the project, from 16% of overall funding in 1993-94 to 52% in 1996, reflecting the fact that consultations and efforts with donors usually bring fruit a few years later and also demonstrating the increased confidence of the donor community in the capacity of the BSEP to effectively guide the design and implementation of Black Sea activities.



Pipeline commitments are also very strong, with over \$12 million pledged for the years 97 to 99. The table in Annex 4 details the contribution of each of the partners. The European Community, through the CEC Phare (covering, for the Black Sea, Bulgaria and Romania) and Tacis programmes (covering, for the Black Sea, Georgia, Russia and Ukraine), has been the biggest contributor, investing already \$4.8 million in the Programme and pledging some \$10 million for 1997-99. Its activities have included:

- *provision of equipment to Bulgaria and Romania*: close consultations with the BSEP-PCU ensured that the equipment delivered was conformed to the same standards and specifications (1993-94);

¹⁴ BSEP Status of Bank Executed Components and bank Options for the Next Phase, June 1996 [Restricted document]

- *technical assistance programme for environmental impact assessment and audit training, coastal zone management and public awareness.* The programme was designed to strengthen the BSEP-ICZM network with supplementary training, case studies and pilot activities (1995);
- *package of targeted activities to support environmental education and public awareness activities, sustainable economic development, pollution assessment and control, coastal zone management and the rehabilitation of the Batumi Aquarium* (approved in 1996, implemented in 1997).

The above description of the Phare/Tacis-supported activities clearly shows that one of the key objectives of the European Union's assistance has been to further support the work of the BSEP and capitalize on its on-going strategy and effort. This has been the underlying position of the BSEP-PCU as a whole, when negotiating additional funding, i.e. to propose activities that can both stand alone as an individual project and also contribute to a bigger picture and fit within an overall framework.

Support from the European Union though does not benefit Turkey. The BSEP-PCU endeavored, as much as possible, to provide its own funding to ensure the participation of Turkey in some of the Phare/Tacis activities.

Bilateral governments have contributed to enhancing the scope of the Programme, each targeting a specific area where they hold particular expertise and know-how. Among them, the Netherlands completed assistance with the Black Sea Information System and the Azov Sea decision support system. The Government of Austria supported preliminary work on sustainable tourism. Japan financed the PCU fisheries officer and an aquaculture project in Turkey. France partly supported the recruitment of the institutional development officer. Canada and Norway respectively helped in setting up a training module and in fielding the Black Sea aquaculture mission. Finally the UK Know How Fund helped schedule an NGO training seminar in late 1996 and is negotiating support to the Bulgaria Emergency response activity center for 1997.

Denmark and Switzerland have clearly expressed their interest to contributing to the programme and discussions are continuing in order to negotiate appropriate modalities of support.

UN agencies have provided their own funding to further strengthen their participation in the Programme. WHO, UNEP and IAEA, all already partners in the implementation of the Programme, and WTO cost-shared a number of training activities, the BSEP-PCU financing the travel and costs of the Black Sea experts and the agencies taking the expenses related to the organization of the workshop and/or the hiring of international trainers. This "cost-sharing modality" gained support also with bilateral governments and seems to have been a favored condition for delivering assistance.

Finally the BSEP-PCU has been cooperating closely with scientific research programmes such as the NATO Science for Stability programme, the EU EROS and CoMsBlack programmes, thereby ensuring that the BSEP-PCU was kept updated on latest scientific research and activities. This cooperation has taken the form of joint training workshops and seminars and joint work programmes for the preparation of the assessment of the state of the Black Sea pollution.

2.6 Government support

The commitment of the governments is reflected, to a certain extent, in the willingness to work jointly for the benefit of the Black Sea, first by ratifying the Convention and signing the Declaration, second by appointing National Coordinators and Focal Points institutions. Governments also drove the process for developing and adopting the BS-SAP with continued attention. Also, collaborating experts and scientists have all shown great dedication and support to the implementation of the Programme.

However there seems to have been an unbalance between the commitment of the individuals and the political will and action to make things happen. The Project Evaluation Report questions “to what extent the governments realize that they must assume more active and innovative role in creating new mechanisms to serve their common property, the Black Sea¹⁵”.

Scientific institutions remain in a very vulnerable condition and in dire financial situation, often unable to meet their commitments to the BSEP. The inability of the institutions to pay the salaries of their employees or to secure the appropriate consumable supplies to carry out the measurements contributed, at times, to slowing down the implementation of the activities. This particular element was earmarked in the original Project Document with a risk of medium to high¹⁶.

Also, the failure of the Istanbul Commission to establish a Secretariat by the end of the Programme and the corresponding two-year procrastinated negotiations which failed to conclude with a common understanding and a financial commitment also “does not seem to reflect any sense of urgency for environmental action¹⁷”. Higher level and increased commitment, political and financial, is now required from the Black Sea governments in order to validate the joint effort undertaken over the past three years by the international community, the GEF partners and the Black Sea experts themselves.

¹⁵ Project Evaluation Report page 12

¹⁶ Revised Project Document RER/93/G31, F. Risks, page 25. “Economic disruption I one or more coastal states to the extent that it delays preparation of studies due to shortage of funds to pay salaries or other local currency expenses”.

¹⁷ Draft Annual Report 1996.

PART III OUTPUTS AND RESULTS

The ultimate output of the Programme was to finalize a BS-SAP and establish enabling mechanisms to encourage its implementation. The BSEP selected and developed an optimal strategy to prepare for the drafting of the BS-SAP. This approach first involved the set up of thematic areas working parties, each entrusted with the task of elaborating an appropriate methodology to guide the preparation of national assessments and regional synthesis reports.

The Project Evaluation Report and the subsequent Update of the Evaluation Report both review in detail the achievements of the Programme with regards to meeting the original three immediate objectives of the Project Document. The latter report includes a table, attached in Annex 5, which evidences that the Programme has achieved its objectives to a close 100% completion rate. Few activities remain incomplete, and reasons for this are spelled out in the following sections. The present report proposes to:

- 1) highlight the elements of capacity building which helped facilitate the establishment and strengthening of the networks;
- 2) bring out the outputs produced in each thematic area of the Programme, as they not only fueled into the preparation of the BS-SAP but also stand alone as substantive outputs useful for the design of individual strategies in each area;
- 3) show the policy advances achieved by the Programme;
- 4) present the outputs with regards to the preparation of sound environmental investments; and
- 5) describe how the BS-SAP was developed.

3.1. Capacity Building

Strengthening the capacities of existing institutions was the initial and an on-going process at the BSEP. The objective was to enable these institutions to carry out, when relevant, accurate, consistent and harmonized studies for the Programme as well as provide them with the tools to better address and manage environmental issues. The BSEP also provided those participating Focal Point institutes with communication and technical equipment; it helped enhance regional cooperation and national cooperation, mobilizing experts around the design of a common strategy. It scheduled both formal training workshops and in-service training through joint work activities with international organizations. It developed data management tools and public awareness materials for use and distribution to a wide audience. Finally it helped Black Sea NGOs take a more pro-active role in environmental management issues.

3.1.1. Equipping the laboratories and institutions

Jointly with the European Union, the BSEP-PCU embarked early on in a process of equipping one reference laboratory per country with updated analytical equipment, paying close attention that similar instrumentation was supplied and that no duplication took place. This turned out to be a very substantive effort, essentially benefiting the Pollution Monitoring network. A joint Phare/Tacis/GEF-BSEP funded study, in early 1994, identified the needs of key institutions in the six Black Sea countries in order to respond to the requirements of the Bucharest Convention. Instrument supplies were financed by GEF for Turkey, Ukraine, Russia and Georgia and by Phare for Bulgaria and Romania. A total of some \$1.8 million (out of which \$1.4¹⁸ million for the GEF) has been disbursed on instruments, but it has only been possible to satisfy about 60% of the list of

¹⁸ The figure includes the provision of not only analytical instrumentation but also the delivery of computer and communication equipment to the BSEP Focal Point institutions.

purchases recommended during the joint study. Nevertheless, the support provided succeeded in raising the capability of most countries to conduct the necessary pilot studies.

The BSEP-PCU also ensured that training sessions would be associated to the delivery of equipment. Training workshops were organized in the region and international experts brought in to assist the local laboratories in the installation and use of the instrumentation and in their adoption of modern monitoring techniques. This training effort was funded either out of BSEP core budget, UN agencies' IAAs or parallel financing arrangements, in particular with the European Union. The provision of the necessary peripherals (glassware, chemicals, distilled water, etc.) though remained problematic throughout the implementation of the Programme. The BSEP-PCU was not in a position to provide the necessary supplies and could only resort to calling on the governments that they meet their commitments. This proved to create unexpected delays in the completion of BSEP monitoring programmes.

All Focal Point institutions have also been supplied with modern communication equipment, including personal computers and an internet connection, allowing the network participants to communicate easily with each other. Essentially also, it enabled the PCU to communicate with those "difficult" areas of Georgia, Russia and Ukraine, where faxes and telephone calls rarely go through. However, communication remained a problem whenever bigger documents had to be sent and urgent telephone consultations had to take place.

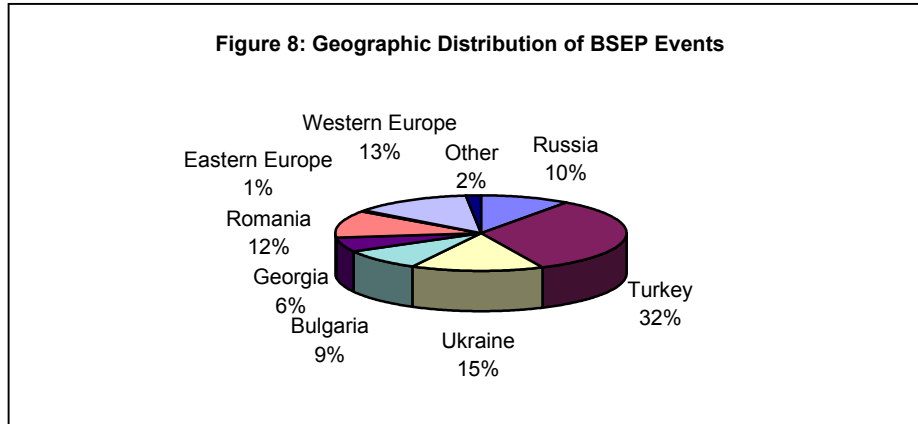
Providing equipment to the region was a substantive effort, in money terms. In total, as noted above, the effort of equipping the institutions amounted to \$1.4 million or 15% of the overall budget for the Programme (versus \$1.1 million in the original budget). It was also a substantive effort, time-wise, chasing equipment that had either disappeared or was stuck in customs offices. International procurement was also slow and customs delays proved more costly and lengthy than expected. Even though some laboratories were still waiting for equipment at the end of 1995, it is remarkable that, within the short period of this Programme, a number of Black Sea institutions, like the Odessa Ukrainian Scientific Center of the Marine Ecology, were completely re-equipped and provided with modern and reliable instrumentation, thereby able to carry out effectively the required monitoring programmes.

3.1.2. Training programmes

A total number of over 120 events have been organized and coordinated either by the BSEP-PCU itself or by one of its associated partners in the framework of the BSEP. This amounts to a record one activity per week over the three year period, an impressive record which could not have been effectively carried out without a rigorous and effective administrative backstopping at the PCU (in terms of logistics, travel, organization and accounting). In the process, some 1,800 persons took part in one or several of these events, the GEF covering their participation for 40% of them. Annex 6 presents the list of policy and training meetings organized over the period 1993 - 1996. The nature of the activities range from working party meetings and coordination meetings (all grouped under "meetings" in the financial tables), regional training workshops organized in the Black Sea countries and training sessions organized outside of the region when the overseas facility was viewed as the most appropriate location for conducting a particular training activity (e.g. Plymouth laboratory in the United Kingdom for biological effects of pollutants, Delft Hydraulics institute in the Netherlands for the Data Management sub-group meeting).

The figure below points out that 85% of the events were organized in the Black Sea countries (the total number is shared among the BS countries, though a greater number of events was scheduled

in Istanbul, the location of the PCU, for convenience and proximity), thereby not only allowing for the greatest participation of Black Sea country residents but also encouraging those institutes and organizations hosting the event to share the responsibility for organizing and leading the activity. Notable among these, a five-day environmental management training course was organized for representatives of all activity centres to help forge competence in their organization and management of BSEP activities. This brought results and, in the third year of activity, an increasing number of events, such as the ICZM Third Working Party Meeting, were fully organized by the Activity Center and/or the Government Focal Points.



Credit for a number of training sessions have to be given to UN agencies, which, in part fulfilling their IAA commitment, in part using their own financial resources, were instrumental in bringing in the region up-to-date methodologies and processes. Also parallel activities implemented by associated partners have included a good number of training workshops, in particular in the area of coastal zone management, pollution monitoring and data management.

3.1.3. Regional and national cooperation

The scheduling of regional meetings (per thematic areas, working party meetings at least once a year, training workshops once or twice a year), frequent communications between the PCU and the Focal Points, participation of the experts into various BSEP activities, visits to each other's institutes, all contributed to enhancing regional cooperation among scientists and experts. It was thanks to these frequent interactions where experts were given a chance to exchange views and ideas that the networks remained active and very much alive, motivated by a sense of common achievement. The process also helped dilute old feeling of distrust and break the isolation of research institutes working without comparative information.

Towards the end of the Programme, communication, which originally was essentially PCU to/from Focal Points, also increased horizontally. This however remained limited and insufficient.

National cooperation also increased in the Black Sea countries. Experts, who used to work in their own compartmentalized scientific area, had a forum to share views and discuss issues. Though limited in the first phase of the Programme, this process is likely to become essential when preparing the national BS-SAPs.

3.1.4. Data management and information tools

The BSEP-PCU undertook to develop a comprehensive information package, not only to make use and combine the scientific and technical information gathered under the Programme but also

to regularly report on the progress of the BSEP and distribute the latest information. The outputs produced include:

(1) *a Black Sea Information System data base*: this is the most comprehensive data base of reference for Black Sea environmental issues. It includes inventories of scientists, institutes, NGOs, private sector organizations, government counterparts, a directory of major marine environmental data sets as well as international and national research projects in the Black Sea region, a directory of cruise summary reports and the Black Sea bibliography. The data base was developed with financial support from the Dutch Government and the software designed by Delft Hydraulics and the Marine Information Service Information. It consists of 5,966 entries. The data base is now available on diskette and on internet.

(2) *a Black Sea Geographic Information System*: led by a team of scientists from the Moscow State University in cooperation with the BSEP-PCU and some 10 other associated institutes of the Black Sea countries, the Black Sea GIS has evolved into a very powerful tool which, when presented at international and regional events, commended admiration and respect. The product combines information and data collected under the BSEP thematic areas and also incorporates digitized cartographic and geographic information. The quality of the data and its resolution varies both between countries and between the various topics. But the tool is likely to be of precious assistance to scientists and managers involved with Black Sea protection. It will be available on CD ROM in the Spring 97 and available to the BSEP networks.

(3) *Black Sea technical series*: building upon the wealth of information gathered under the thematic areas, a series of technical reports have been professionally printed and published under the UN Publications. At the time of this report, two books had been published (“Black Sea Bibliography” - a 4,542 entries document which focuses on literature for the region since 1974, and “Aquaculture in the Black Sea”), a third was due in the immediate future (“Romanian Biodiversity”) and a number of reports were being finalized (“Harmonizing legislation in the Black Sea”, “Developing Sustainable Tourism practices”, “State of Pollution of the Black Sea” among others).

(4) *“Saving the Black Sea” newsletter*: four regular issues of the popular Black Sea newsletter have been published in both Russian and English (issued at 2000 copies in each language). The newsletter is widely distributed and includes contributions from Black Sea experts and PCU staff members.

(5) *public awareness materials*: the PCU has been very active in producing its own public awareness materials which were then distributed through the focal points and NGO channels. 10,000 copies of the Black Sea poster have been distributed and posters have been seen not only in all Black Sea countries but also in places like Washington World Bank headquarters, Eurocoast European bureau in Dublin and Tacis Brussels office. An attractive ten-panel display has been designed to colorfully and simply describe the status of the Black Sea and BSEP actions. The portable panels were inaugurated at the Environment for Europe meeting (Sofia, October 1995) and displayed at various BSEP-related events. A fisheries leaflet addressing the problem of the decline in diversity of species supporting commercial fisheries in the Black Sea was published in English, Turkish and Russian and distributed to schools, the general public, scientists and governments. Financially sponsored by the World Bank, TVE and the BSEP, a video “Black Sea death or reprieve” was produced to vividly expose the environmental issues related to the Black Sea. Introduced by David Attenborough, it was broadcast on BBC channel and English, Russian and Georgian copies were distributed to the Black Sea countries. Finally brochures, badges,

posters and a wealth of other public awareness materials were produced by the BSEP-PCU and the NGOs at the occasion of the Black Sea Day (31 October 1995).

(6) *a PCU library*: with over 500 books and reprints, the PCU library covers all issues pertaining to the Black Sea ecosystem and its environmental management.

(7) *an internet connection*: since Spring 1996, a BSEP Home Page is available on the internet at <http://www.domi.invenis.com.tr/blacksea>. It contains general information on the BSEP, addresses and contacts (it includes access to the Black Sea Information System) and lately the entire text of the BS-SAP.

These tools were made available to the scientists and partners in the BSEP networks, facilitating their access to information and professional contacts and giving them the means to promote their activities and efforts in their own countries. Time-consuming, the BSEP emphasis on generating and distributing information proved extremely valuable for nourishing an image of the BSEP and sustaining an active network.

3.1.5. Public participation and NGOs involvement

Though endowed with very limited funding from the core budget, BSEP-NGO activities have been successful in mobilizing the NGO communities of the Black Sea countries and helping generate public awareness projects. NGO representatives not only benefited from special activities targeted directly at them (NGO component of the budget), but also had the opportunity to be involved in a number of working party meetings, contributed actively to the Sustainable Tourism initiative (50% of the contracts for the preparation of the Sustainable Tourism reports were awarded to non-governmental organizations) and participated in the BSEP policy processes, such as the Donor Conference and the BS-SAP meetings. These can not be quantified in money terms, but the budget figure of NGO-targeted activities under-scores the real BSEP efforts put into strengthening the participation of NGOs into the Programme.

The degree of maturity of the NGO movements in each of the Black Sea countries varies greatly from one to another; the incorporation of non-governmental organizations is fairly recent in the Black Sea countries (with the exception of Turkey where some NGOs have been established for a longer time) and their level of organizational structure ranges from fully staffed professional offices to volunteer associations. Also their motives stem from various reasons. Often NGOs were established out of a need to break away from the prevailing political system and/or to try and capture the newly coming funds earmarked for NGOs. As a result, very few are community-based organizations and linked to the people they are supposed to represent. In fact, often these NGOs only represent themselves and have failed to gain credibility in the eyes of both the communities and of the governments.

(1) Faced with the above situation, the BSEP opted to focus its efforts on mobilizing and establishing *functioning and representative networks of NGOs*, both at the national and regional level. The objective was to help Black Sea NGOs learn from each other in terms of mandate and actions, expose Black Sea organizations to overseas experience, and organize and strengthen an NGO network capable of bringing inputs into the BSEP and the environmental management of the Black Sea in general.

Thanks to BSEP funding, national Black Sea NGO fora were organized in all Black Sea countries at the end of 1994, 1995 and 1996, each attended by some 15 to 25 participants from various

organizations. These fora were an opportunity for Black Sea NGOs to exchange views and ideas and discuss a common strategy for action. Two representatives from each national forum were elected to take part in the International Black Sea NGO Forum meetings (Constanta, October 94; Gurzuf, November 95; Tbilisi, January 1997). Representatives from other international NGO networks such as the Danube NGO Forum, Coalition Clean Baltic, Eurocoast and Milieukontakt, attended the Forum meetings. The regional fora grew more organized and more focused over the years. The 1994 Regional NGO Forum agreed on a list of priority areas for actions and on the national organizations that would lead each of the priority areas - these included environmental education and public awareness (Georgia), public participation and NGO directory (Romania), Information and communication (Ukraine). The 1995 meeting drafted an original mandate for the Black Sea NGO Forum and prepared a set of pilot projects to be submitted to the BSEP Donor Conference for consideration. Finally, the 1997 Forum reflected on a basin-wide strategy for NGO involvement in the process of designing and implementing National Black Sea Strategic Action Plan. International NGO Forum meetings elected two delegates to represent them at the BSEP Steering Committee. This representation system, though limited because it could not reach out to all those organizations interested in the process, proved however to work effectively and enabled NGO representatives to participate in such BSEP policy activities as the Donor Conference and the preparation of the BS-SAP and later join, as Black Sea representatives, international meetings of relevance such as the "Seas at Risk" NGO forum.

(2) In addition to facilitating the incorporation of the Black Sea NGO Forum, the BSEP helped organize *training sessions* for enhancing the skills of those organizations genuinely involved in the protection of the Black Sea. A workshop to develop information system and communication facilities took place in Kiev in November 1995 and a regional training workshop in public participation and organizational management, supported in part by funds from the UK Know How Fund, was scheduled in early 1997.

(3) With limited funding available, the BSEP organized a *small grants pilot programme* in 1995 to enhance public awareness of environmental issues. Small contracts were awarded to Black Sea organizations and each produced exceptional results, including an educational course package with a 60-slide series and a teachers's manual for use in Crimea primary schools, a Black Sea drawing competitions for school children and a 1996 calendar published from the selected drawings, and a seminar and public awareness activities on the effect of coastal agricultural activities on the pollution of the Black Sea. A Black Sea NGO directory was also commissioned by the BSEP in 1995 and 1996 to facilitate networking and contacts among NGOs. These small grants and commissioned activities greatly helped enhance the confidence of those organizations in their ability to implement meaningful projects.

Finally a series of small but notable public awareness projects were organized in all Black Sea countries by the national NGO Fora to celebrate the International Black Sea Action Day on 31 October 1996. The initiative for the Black Sea Day came from the NGOs themselves and it is to their credit that the signing of the BS-SAP became an acclaimed public event. Celebrations of the Black Sea Day will also take place in 1997, with support from the Phare/Tacis programme, and, hopefully, every year thereafter.

(4) *Associated partners* contributed significantly to strengthening NGOs' participation in Black Sea environmental management. The Phare programme has been very active in Romania and Bulgaria, first conducting a full needs assessment of the organizations, then supporting the establishment of environmental information centers in these two countries and developing a pilot education project in Romania. Through the Phare/Tacis coastal zone management programme,

small public awareness projects were launched in the five Black Sea countries, including the creation of an eco-library in Batumi, an exhibition centre in the Dneistr wetlands and a series of media events on the coast of Romania. Finally the World Bank municipal infrastructure and rehabilitation project supported the implementation of a 3-week Youth Eco-Academy training in Georgia.

The GEF-NGO small grants programme in Turkey¹⁹ helped re-inforce the mandate of the GEF-BSEP and included, in its area of support, projects that would contribute to the protection of the Black Sea.

Though Black Sea NGOs are still searching for the means and goals of their survival and effective participation, the BSEP, in a very cost-effective way, has given them a chance to be involved and a chance to unite forces. The Evaluation Report noted that “NGOs were a party and fully involved in the programme from its earlier stages²⁰”. In need of additional financial and technical support, Black Sea NGOs will also require continuous exposure to international NGO norms and activities but also will need to undertake a more profound internal questioning of their scope of work and *raison d’être* if they are to become effective partners in enhancing public participation in the Black Sea countries.

The Evaluation Report “found that the impact of the BSEP on these [visited] institutions was incisive²¹”. With regards to the number of experts associated to the Programme and trained to up-to-date methodology and instrumentation, with regards to the number of events organized by the BSEP and the diversity of information and data management activities undertaken, with regards to the increased involvement of the NGOs and the establishment of the Black Sea NGO Forum, with regards to the level of cooperation achieved within the framework of the BSEP, there is no doubt that the Programme has had a formidable impact upon these organizations and institutions of the Black Sea and that the immediate objective in this area has been met, i.e. a strong institutional and scientific basis for implementing environmental policies has been built, networks are functioning and training facilities are available.

3.2. Outputs from thematic areas

For each thematic area, the same strategy was applied to guide the process all the way to the preparation of the BS-SAP. This strategy was schematically presented in Figure 1 on page 5 of this report and includes the following steps:

- establishment of the Activity Centers and working parties,
- enhancement of their capacities through provision of equipment and training,
- design of the methodology through joint work programmes between Black Sea institutions and international organizations,
- preparation of national assessment reports,
- preparation of synthesis regional report,
- technical combined evaluation (Transboundary Technical Analysis)
- development of the Black Sea Strategic Action Plan.

¹⁹ In Europe, the GEF-NGO small grants programme is at present only operational in Turkey and Poland.

²⁰ Project Evaluation Report page 9.

²¹ Project Evaluation Report page 8.

What is remarkable is that, though working in apparent isolation over the first half of the Programme, working parties eventually were able to effectively combine their work and consolidate their understanding of the issues. Because a common strategy was followed by each working party, best experts from the networks could successfully pull together the most salient results to produce a valuable technical analysis, the Transboundary Diagnosis Analysis (see section 4 below), the technical ground work for the BS-SAP.

The results obtained in each of the thematic areas also constitute, by themselves, a substantive source of information and a reference in terms of process and methodology. These results are being reviewed in this section.

3.2.1. Emergency response

The Bucharest Convention includes a Protocol on cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations²². It is within that context, that the BSEP, with support from the International Maritime Organization (IMO), has helped enhance national and regional capacities to plan for and respond to pollution emergencies.

BSEP activities in this area got an unexpected practical launch when the oil tanker “Nassia” exploded and caught fire at the entrance of the Bosphorus strait in March 1994. Upon request from the Turkish Government, the BSEP-PCU together with technical support of the IMO/UNEP Regional Emergency Marine Pollution Response Centre for the Mediterranean Sea (REMPEC) prepared an Action Plan identifying a set of pragmatic remedial measures which might be taken in order to limit the environmental damage resulting from this accident. The Nassia oil spill unwillingly helped bring urgency to the need for preparing national and regional emergency response action plans. It also enhanced the confidence of the Turkish Ministry of the Environment in the technical skills and professionalism of the PCU staff.

The three successive working party meetings recognized the need for developing national and regional contingency plans identified by the Bucharest Convention; however it became clear that the process of developing such plans required considerable more time and funding than that available through the Programme. The work of the working party therefore concentrated on assessing the current situation, developing guidelines for regional and national plans, preparing a regional plan for emergency response, providing technical training and strengthening links with private sector operators.

A regional assessment²² was issued by the BSEP in 1995 on the basis of a 1994 mission undertaken by the IMO together with responses to a detailed questionnaire sent to each country. And an IMO-prepared draft Regional Oil and Chemical Pollution Emergency Plan for the Black Sea was considered instead.

The BSEP collaborated closely with the IMO for capacity building activities, i.e. the organization of training seminars, technical assessments and advice in the Black Sea countries.

Thanks to its association with REMPEC, the BSEP brought in the region the experiences of the Mediterranean in terms of emergency preparedness and response, methodology, international regulations and liabilities and up-to-date technology of intervention.

²² Emergency Response and Contingency Planning in the Black Sea Region: Current Status and Strategies for Improvement, BSEP-PCU, 1995.

Finally, though the original outputs could not be fully completed because of shortage of time and funding, it is important to point out that this working party was successful in inviting private sector firms to participate in the BSEP work. Major oil companies involved in the production and/or transport of oil in the Black Sea region attended the working party meetings. And the Shell Company of Turkey organized an oil spill management workshop in Istanbul in December 1996. These are but initial steps in a process of cooperation between BSEP and private sector interests. These are encouraging initiatives, which may be replicated in other of the BSEP thematic areas.

3.2.2. Pollution Monitoring

From the inauguration of the Black Sea Environmental Programme (BSEP), it was evident that much of the existing data on chemical pollution was not backed-up by the necessary reference to data quality assurance and quality control programmes. So many management decisions depend upon valid data that it was imperative to improve the capacity of the institutions in the region and to work with them in order to produce a first pilot survey of chemical pollution in the Black Sea. (including nutrients, hydrogen sulphide and oxygen as well as heavy metals and synthetic organic compounds).

(1) The work of modernizing and upgrading the capacity of the six key institutions is still incomplete. This is partly a result of the time and expense involved in re-equipping institution and retraining scientists (see section 1 above). Also, equipment procurement tends to be a lengthy process and some of our partners had not completed this process by the end of 1996. However, remarkable progress has been made and, during 1995 and 1996, a pilot study of pollution in the Black Sea was completed. The work included measurements of potential pollutants and, more recently, the use of mussels as sentinel organisms for tracing the levels and biological effects of key contaminants. The development of a "biological early warning system" is a major feature of the agreed future monitoring programme.

*(2) But pollution assessments are not merely a matter of good measurements of the environmental levels and risks of the offending substances. It is necessary to ascertain the sources of the pollutants and their rate of introduction. In the past, countries have been reticent in releasing such information but the Black Sea is an example of how this can be achieved. The *Land Based Sources survey* methodology, based upon the World Health Organization (WHO) rapid assessment technique, was discussed and agreed at a workshop in Istanbul in late 1994. In early 1995 the methodology was translated into Russian, Turkish, Romanian and Bulgarian and contracts were issued for implementation of the survey to the focal points for routine pollution monitoring in all six Black Sea countries. Surveys were completed in all Black Sea countries by June 1996. The Activity Centre for Routine Pollution Monitoring took responsibility for conducting missions to assist the focal points and assure data of uniform quality and of analyzing the data. The results of the study became one of the keystones of the Black Sea Transboundary Diagnostic Analysis (TDA) and of the BS-SAP itself. The accuracy of the results is only as good as these literature values and the response of the persons answering the questionnaires. The present phase of the study needs following up with site surveys and successful intercalibration and intercomparison exercises in order to achieve comparable results between all participant laboratories.*

(3) Work on the pilot monitoring studies was active during the three year of implementation of the BSEP. The monitoring programme of the Odessa Activity Centre completed over eight cruises using their own funding. Work on the Black Sea Mussel Watch was completed in all six

countries with the technical support of the IOC of Unesco (using the services of the Plymouth Marine Laboratory in the UK and Texas A & M University of the USA) and the International Atomic Energy Agency (IAEA) Marine Studies Laboratory in Monaco. Additional financial support was given by the European Union. The Mussel Watch was combined with an extensive training programme, both in Plymouth and in the region, and the six participating institutions are now ready to begin a full-scale biological effects monitoring programme.

The pollution pilot studies, for the most part completed in 1995, were reviewed at a major workshop held at the Programme Coordination Unit (PCU) from 18 - 23 March 1996 under the co-sponsorship of the BSEP and the EROS-21 programme and with the additional participation of scientists from the Intergovernmental Oceanographic Commission's Global Investigations of Marine Pollution (GIPME), from the NATO Science for Stability Programme and from the CoMSBlack programme. A total of 98 leading Black Sea scientists met at the PCU for a total of six days of analysis of the results of the EROS-21 and other studies. As a result, the first comprehensive review of "The State of Pollution of the Black Sea" was prepared and will be published in Spring 97 as part of the BSEP Technical Series. The review also describes the design of the future Black Sea "Status and Trends" monitoring system.

Because these form the cornerstone of the overall assessment of the Black Sea ecosystem, the main conclusions of the review are illustrated in Box 1 below.

**Box 1: How Polluted Is The Black Sea? Where Does The Pollution Come From?
Key Results Of The BSEP Studies.***Nutrients And Eutrophication*

This is clearly the main culprit for the ecological degradation of the Black Sea environment. The present study revealed that some 58 percent of the total nitrogen and 66 percent of the total phosphorus flowing in dissolved form to the Black Sea come from the Danube basin, making the participation of Danubian countries in the clean-up effort of paramount importance. Continued research efforts are also needed through programmes designed to develop scientifically based strategies for mitigation.

Sewage

The BSEP pilot survey of microbial contamination of bathing waters was disappointing, largely due to the unwillingness of certain authorities to use standard methodologies and to exchange data. Even so, the data received showed a "fail rate" for samples of 5 - 44 percent. In other words, between 5 and 44 percent of the samples did not meet the sanitary criteria established for the country in question. Of course, not all of the Black Sea bathing waters are dirty but there are no commonly agreed criteria for informing the public concerning the relative health risks. In the Black Sea coastal region, approximately 10,385,000 people are linked to sewerage systems and discharge an estimated 571,175,000 m³/year into the Black Sea or into downstream stretches of rivers and from there to the sea. The current pilot studies confirmed that regular beach closures occur in many of the Black Sea countries and that, although no cause-effect relationship has been clearly established, there are increasingly frequent outbreaks of serious water borne diseases such as cholera and hepatitis A. The need for better sewage treatment is evident, as is the need for greater transparency in the gathering and diffusion of information on this subject.

Oil Pollution

Of the 111,000 tons of oil entering the Black Sea each year, 48 percent is transported by the Danube river and most of the remainder is introduced from land-based sources through inadequate waste treatment and the poor handling of oil and oil products. The amount reaching the Black Sea from ballast water discharges by ships is unknown but thought to be considerable.

The concentration of oil was measured in sediments and sea water. The sediment levels were found to be of concern near sea ports (Odessa and Sochi), but in open coast and the Bosphorus outflow areas, the levels were relatively low. The levels of oil and petroleum hydrocarbons in sediments were generally comparable with those of the Mediterranean. In the EROS measurements of dissolved oil, rather high levels of fresh oil were observed, especially near the discharge of the River Danube. Concentrations found in the surface waters of the western Black Sea are one order of magnitude higher than in the western Mediterranean. Concentrations of poly-aromatic hydrocarbons (PAH), a group of particularly toxic petroleum hydrocarbon compounds, are generally low. In view of the high levels of dissolved oil however, measures to reduce its concentration in the Black Sea are considered necessary.

Pesticides and PCBs

The concentration of these compounds was found to be rather low in most cases. Some slightly elevated concentrations of lindane were found near the Danube discharge, but most samples were comparable with the Mediterranean. In order to double-check this situation a "Mussel-Watch" (survey of concentration of chlorinated pesticides and PCBs using mussels as sentinel organisms) was conducted in autumn 1996. Certainly these compounds are not a major concern in the open Black Sea.

Heavy Metals

Quite a large amount of reliable data has been gathered on the concentration of heavy metals in the Black Sea. This data has been analyzed in such a manner as to distinguish natural sources of metals from anthropogenic (human-induced) ones. From this analysis, it is apparent that the Black Sea is not generally polluted by heavy metals. There are some areas where elevated concentrations may occur (near "industrial hot spots") and it will be important to complete a more detailed survey of coastal sites. The fact remains,

however, that the heavy metal concentrations in the Black Sea are virtually indistinguishable from natural levels.

Radionuclides

There are obvious concerns regarding the level of radionuclides in the Black Sea and, thanks to the sponsorship and guidance of the IAEA, quite a large effort is underway in this area. Certainly, concentrations of some radionuclides are one order of magnitude higher in the Black Sea than in the adjacent Mediterranean. But studies on the radiological consequences of radionuclides in the world ocean and the Mediterranean indicate that radiation doses to humans from anthropogenic radionuclides in the Black Sea are low. Work will continue on this matter under the auspices of the IAEA.

Litter

There is little quantitative information on this problem in the Black Sea. Some municipalities in the south and south-east part of the sea are known to be discharging municipal garbage to beaches, the sea or to river banks discharging to the sea. As a consequence, beaches are highly littered. The situation below the waterline is unknown.

(4) *Regarding the bathing water and drinking water monitoring issues*, there has been considerable cooperation between the Activity Centre in Istanbul and WHO (Rome). Although the degree of implementation of the work was limited and the results rather disappointing, enough information was gathered to clearly demonstrate the severity of the microbiological pollution problem in the region. WHO sponsored national workshops on cholera following a series of outbreaks in 1994-95 and took a large number of initiative to seek additional donor funding. The main difficulty faced was the unwillingness of Ministries of Health in many countries to release data to the public domain. A call for greater transparency in such information was incorporated in the BS-SAP.

(5) The sharing of information on pollution sources is a notable achievement of the BSEP. In order to make the data better available to managers and to the public, it is currently being transferred to the BSEP Geographical Information System (GIS). This approach can gradually be extended until information on the entire Black Sea basin becomes available and basin wide management becomes a reality.

The cost of completely renovating the Black Sea pollution monitoring network was considerably underestimated in the original GEF-BSEP project document, but it has nevertheless been possible to significantly improve the capacity of laboratories in each of the Black Sea countries and to derive measurable results. The forthcoming report on the “state of pollution of the Black Sea “ is bound to become an important reference document and the most up-to-date source of data available on the Black Sea.

Achievements would not have been possible without the continuous support from those UN agencies which, under the coordination of the BSEP, contributed valuable expertise and guidance in their respective areas of competence. More so possibly in this thematic areas, cooperation among UN agencies has been effective. Credit is herewith given to the IAEA Marine Studies Laboratory in Monaco, the WHO Rome Environmental Health Division, and the IOC of Unesco for their consistent support.

Finally it needs to be emphasized that pollution monitoring is a long term effort that requires the collection and study of regular and reliable sets of data. This can only be achieved with further support from the international community, since the cost of operating the “newly equipped”

facilities is not insignificant and training in the use of instrumentation and data quality assurance must continue to be provided.

3.2.3 Biodiversity

This component of the BSEP was implemented jointly by the BSEP-PCU and the World Bank.

(1) Under the guidance of the BSEP-PCU and the World Bank, six national biodiversity reports were completed by the end of Programme. Their preparation mobilized hundreds of specialists throughout the region. Most are the first and most comprehensive reports ever to focus not only on the individual country's fauna and flora but also on the surrounding environment in an attempt to draw up habitat-preserving plans. These national reports, and a regional assessment based on them, will be published by the Black Sea Environmental Programme (BSEP) in the UN Publications' Black Sea Environmental Series.

(2) Biodiversity pilot proposals were prepared by the Black Sea countries in 1995 and submitted to the World Bank, which was responsible for their review and initial funding as one-year pilot projects (using funds from the BSEP-World Bank component). However, in late 1996, the World Bank informed that funds initially made available proved exhausted and none of the pilot project could be implemented, unless additional funding is secured.

The first draft of the Regional Investment Strategy, prepared in October 1996, has been found inadequate and in need of considerable review and updating.

On the other hand, thanks to a coordinated effort by the BSEP-PCU and the European Union Tacis programme, a high-profile project to rehabilitate the Batumi Biodiversity Centre and its aquarium to its original educational vocation is underway. ECU500,000 have been earmarked in the forthcoming 1997 programme of assistance to refurbish and repair the facilities.

(3) In the process of the assessment work undertaken under the biodiversity component, the four marine mammal species of the Black Sea received a significant "high-profile", from both public awareness and ecological perspectives. With assistance from UNEP and the World Bank, a sub-group working party held an important meeting in December 1995 in Istanbul. It developed a regional marine mammal strategy and identified initial pilot projects and longer-term investments in line with the BSEP biodiversity strategy. In the same area, delegates from Black Sea and Mediterranean states and representatives of the European Union signed a long-negotiated Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area. Such a step towards negotiated international convention exemplified the efforts of the BSEP to associated both practical These advances in international conventions and arena

With a package combining the production of scientifically based technical reports for assessment purposes, the implementation of flag raising pilot projects and the negotiation of policy documents for regional conservation measures, biodiversity is an area of the BSEP where effective results could have been reached, should all its individual components have timely materialized as originally planned.

3.2.4. Integrated Coastal Zone Management

Integrated Coastal Zone Management (ICZM) is a tool to develop coastal resources in a sustainable manner while mitigating conflicts between users of these resources. The origin of coastal problems is often located outside the coastal zone and may be associated with sectors that are unaware of the consequences of their actions. Since sectoral policies pay limited attention to issues outside their sectoral arenas, the key to addressing coastal problems is to enable inter-agency collaboration, through establishment of ad-hoc multi-sectoral committees. Government agencies, but also representatives of the private sector, NGOs, local authorities and the coastal communities should be encouraged to participate in the discussion about and design of coastal zone management plans.

The ICZM component of the BSEP, implemented jointly by the World Bank and the BSEP, followed a rigorous strategy to develop and integrate national ICZM assessments:

- national ICZM networks were established in all six countries to gather support and inputs for the preparation and review of the national reports;
- draft definitions of ICZM boundaries were proposed and are under internal government review for adoption in each Black Sea countries;
- comprehensive national assessment reports were prepared, reviewing political, administrative, geographic and socio-economic elements affecting the coastal zone and summarizing national priorities and proposals for streamlining management of the resources of the coastal area. These reports were the first attempts to synthesize the existing conditions and identify the multi-sectoral issues that affect the coastal region within each country.
- a regional synthesis report and recommendations were drafted by the Activity Centre and served as the key background document for the experts developing the TDA.

In preparation for the implementation of this strategy, ICZM focal points were taken on a study tour in the USA to practically approach American experience of coastal zone management. A series of successful training sessions were then scheduled in the Black Sea region, with expert advice from the World Bank, to further guide and support the process of preparation of the national reports. Though slow to take off, this component of the BSEP proved one of the most successful, not only because of the quality of the reports produced, but also because the Activity Centre and its associated focal points eventually constructed a solid and competent working party.

This component of the BSEP is also probably the one which received most attention from donors. Under the Netherlands collateral contribution²³, Russian, Ukrainian and Dutch experts completed the Decision Support System for the Azov Sea, a US\$350,000 programme. In Georgia, the World Bank's Municipal Infrastructure Rehabilitation Project (MIRP), earmarked funds for the restoration of critical infrastructure services in the coastal municipalities and scheduled training seminars on coastal zone management for local authorities, government officials and NGOs. A 12-month Phare/Tacis technical assistance programme provided advice and support, through a series of workshops and practical case studies to authorities and organizations with coastal zone management responsibilities. In particular the training focused on environmental impact assessment and environmental auditing as tools for proper coastal zone management. Finally, in 1994, 95 and 96, the BSEP facilitated the participation of Black Sea representatives in professional courses organized by the UNEP/Mediterranean Action Programme-backed Medcoast institute.

²³ Integrated Water Resources and Management of the Azov Sea programme, Parallel programme of the Dutch Government, 1995

In parallel with the preparation of national reports, ICZM pilot projects were identified, selected and fully developed. These were to demonstrate ICZM principles and methodologies at the national and regional level. Though the pilot projects were approved by the World Bank, funds initially earmarked for this activity could not be made available anymore. A recent status report from the World Bank confirmed that it is currently seeking donor financing for the pilot project proposals prepared during the pilot phase under this component²⁴.

The ICZM working party solicited that particular emphasis be given on the study of the tourism sector as one of the key stakeholders of the coastal zone. Given that special attention to this sector should strengthen the assessment of coastal zone management issues, a project was developed to review current coastal tourism practices and stimulate the development of sustainable tourism practices. With support from the Austrian Government and the World Tourism Organization, detailed assessment reports were prepared which highlight the different barriers to the development of sustainable tourism activities in the Black Sea countries and propose a series of pilot projects in the area of eco-tourism, institutional strengthening and training, and industry cooperation and networking. The activity and the resulting synthesis report was received with interest by both Black Sea government and donor organizations. Tourism is one of those sectors, which, together with aquaculture, could contribute to the revival and/or development of the coastal zone, if managed properly. As such, it holds great potential as sources of revenues to both sustain the livelihood of coastal communities and, as users of the resources, finance part of the cost for the preservation and sustainable management of the coast. The BSEP initiative in this area helped focus attention on the issue and generate donor support to the sector. In 1997, the European Union Phare and Tacis programme is launching a programme of assistance which includes support to sustainable tourism activities and the Austrian Government has pledged to provide additional support in this area.

Finally the efforts of the BSEP ICZM working party resulted in important breakthrough in policy and legislation; a decree on the protection of the Black Sea Coastal Zone²⁵ was passed in Russia and a comprehensive coastal zone management legislation was recently adopted in Bulgaria. Similarly in the other Black Sea countries, coastal zone legislation has been developed and is under various stages of approval and review by the respective assembly.

Because it demanded that cross-sectoral linkages be established, the ICZM component of the BSEP was possibly the most innovative in terms of institutional development for the region. Though the short time frame of implementation could not allow for structures to be firmly established, the notion of pluri-disciplinary teams has taken roots in a number of coastal pilot sites, thereby facilitating the drafting of plans for an harmonious utilization and development of coastal and marine resources. The ICZM networks thus established will play an important role in the design and drafting of National BS-SAPs.

3.2.5 Fisheries

The rational management of fisheries is dependent on the possession of reliable data on the exploited fish population and the economic circumstances of the fishery communities. Until recently, the lack of this information had hindered all attempts to conduct a regional assessment on the past and present status of fishery activities in the region. The BSEP organized a survey in the form of extensive questionnaire-based interviews at major fishing ports and cooperatives in the region to collect new data covering the period 1975 to 1995. The collected data are believed

²⁴ BSEP - Status of World Bank Executed Components and Bank Options for the second Phase, June 1996.

²⁵ Yeltsin decree, 1995

to be the most accurate and comprehensive currently available and the survey has established a baseline for the future development of a regional database. However to consolidate the information, surveys should be conducted every year.

Though outside of the scope of its Programme, the BSEP encouraged the Black Sea countries to develop and negotiate a Black Sea Fisheries Convention. Unsuccessful so far in reaching a common agreement, the Black Sea countries have however welcomed the support of the BSEP in facilitating consultation and access to updated stock database and methodology.

In addition to the BSEP survey, a regional study²⁶ has been completed, using historical data on the stocks of commercial fish species in the Black Sea and their rational exploitation. The study, co-funded by the Soros Foundation, is to be the regional report of reference for the preparation of the BS-SAP. It is to be published under an FAO technical publication series.

The prime emphasis of the programme has been on aquaculture, a promising sector for the Black Sea but still in its infancy. A study mission organized jointly by the World Bank and the PCU with support from the Government of Norway visited the Black Sea countries in 1994 to review the situation of the marine aquaculture industry in the region and present a series of recommendations and project proposals. The resulting UN-published report stressed the merit of setting up demonstration projects of good commercial and environmental values. The finalization of the report helped secure financial support from the European Union (demonstration projects would be implemented in 1997 that incorporate training in both business management skills and environmental consideration) and bilateral assistance from the Government of Japan to start a cage farming project in Turkey.

The original spelling of the Odessa Declaration does not include a reference to the Fisheries sector. However, when required, the BSEP provided technical advice and assistance from an environmental perspective. It helped foster the exchange of information and encouraged an increased dialogue among the countries. Finally, looking at aquaculture development in the Black Sea, the Programme helped assess the current practices of the industry as well as identify the potentials of the sector in terms of economic opportunities and environmental management.

Throughout these thematic areas, the BSEP-PCU has worked, successfully, to generate additional support from parallel financial sources to strengthen the core efforts of the Programme. It also benefited from the extreme dedication and loyalty of those Black Sea experts who were associated with the Programme. The BSEP has effectively established and maintained networks of active groups, building upon the excellent competence of Black Sea experts. Finally, it received valuable support from the partner UN agencies and the other International Waters Programme (GEF-sponsored Danube River Basin and UNEP-backed Mediterranean Action Programme in particular) and with the private sector. These factors have significantly facilitated the delivery of outputs. A tentative list of BSEP-produced outputs and publications is attached in Annex 7 as reference.

On the other hand, the changing political context and mostly the difficult economic situation in the Black Sea countries have, at times, slowed down the process. Communication and travel proved to be more of a difficulty than anticipated and the costs (in time and money) of some of

²⁶ Environmental Management of Fish Resources in the Black Sea and their Rational Exploitation, Soros Foundation / FAO / BSEP, draft 1995

the activities were greatly underestimated (in particular for the development of national contingency plans).

3.3. Developing an appropriate policy and legislative framework

The entry into force of the Bucharest Convention and its three Protocols established binding requirement on the Black Sea governments to develop and implement legal tools for the controlling marine pollution in the Black Sea the governments with requirements. Two regional bodies were to help develop this policy and legislative framework: the Istanbul Commission and its Secretariat and the PCU-based *Advisory Panel on the Harmonization of Environmental Quality Criteria, Standards, Legislation and Enforcement*.

The Panel met in Istanbul in April 1995 and prepared recommendations concerning the implementation of the Bucharest Convention and the enhancement and harmonization of environmental legislation and standards, which were forwarded to the Istanbul Commission. In addition, a comprehensive report reviewing the status of environmental legislation in the Black Sea countries was prepared by the BSEP-PCU. Also, further to the requirement of the Odessa Ministerial Declaration which calls for a triennial review of its implementation, the preparation of a systematic review was commissioned. The review pointed to encouraging real progress made by all, or most, Black Sea countries on a wide range of issue. This review was made available to governments and BSEP partners.

On the other hand, the BSEP has provided continuous support and encouragement to the Black Sea countries so that they reach an agreement over the *integration of the Istanbul Secretariat of the Black Sea Commission*. Though not directly responsible for its establishment, the BSEP rightly felt, from the start, that the sustainability of the Programme was highly dependent upon the capacity of the Governments to jointly commit to the support of a Black Sea institution. This endeavor has costed the BSEP-PCU considerable efforts and has, alternatively, been a source of hope and disappointment over the full three years of the Programme. That ultimately no decisive step has yet been taken in this area is a reason of concern and is contradictory to the commitment expressed by the Governments at several occasions that they share a common interest and desire in the implementation of the BS-SAP, commitment restated recently by the ministers of the environment of the Black Sea countries who signed the BS-SAP document in Istanbul in October 1996.

Finally on the policy side, the key achievement of the Programme must have been the *preparation of the BS-SAP*. The Black Sea Action Plan, culmination of three years of partnership between the organizations involved in the GEF-BSEP and the government of Black Sea countries, should facilitate profound policy changes in Black Sea countries as well as the development of harmonized environmental objectives and key environmental investments.

3.4. Facilitating the preparation of sound environmental investments (and innovative financial mechanisms to finance the protection of the Black Sea).

Facilitating the preparation of sound environmental investment was an essential component of the Programme. The main tasks under this heading were to: 1) identify and select an Urgent Investment Portfolio and 2) develop a Priority Investment Plan, a more comprehensive long term investment strategy to be integrated into the BS-SAP. The World Bank, as associated agency under IAA 93058 of August 1993, was responsible for the execution of this component.

(1) The *Urgent Investment Portfolio* is the largest Bank managed component of BSEP, accounting for some 65% of the overall IAA amount, or \$1.95 million. From the 13 projects initially identified, 6 projects were finally selected for pre-investment studies financed under the BSEP. As of today, all of the UIP funds have been committed to these projects and most have been disbursed. Annex 7 presents a detailed description of the UIP process as well as a status of other World Bank executed components. Below is a summary list of the UIP projects:

<i>Country</i>	<i>UIP</i>	<i>Description</i>	<i>Budget</i>
Bulgaria	Coastal Preservation Facilities	development of land use plans for 14 coastal municipalities	\$0.45
	Bulgaria Water Company restructuring	Varna Municipal feasibility study	
Georgia	Municipal Infrastructure Rehabilitation Project	EIA/audit/ICZM training prog., public awareness projects, Batumi refinery env. Audit, Kolkheti wetlands study	\$0.3
Romania	n/a		
Russia	Community Social infrastructure Project	preparation of Greater Rostov Env. Strategic Action Plan	\$0.41
Turkey	Solid Waste Management (scheduled for approval in FY99)	study on appropriate solid waste man. Practices on Black Sea coast	\$0.2
Ukraine	Municipal Water Project - Odessa (scheduled for approval in FY98)	feasibility study for municipal water services and water quality monitoring	\$0.45
	Southern Ukraine Env. Project (scheduled for approval in FY98)	identification of hot spots in Mariupol and biodiversity conservation schemes in Crimea	
Regional		Preparation of guidelines ; reconnaissance mission; preparation of UIP report.	\$0.13
TOTAL			\$1.95

The UIP projects included a substantial training component (including practical execution of EIA and environmental audit training). Noteworthy the first major investment was approved in the Black Sea region, thanks to support from UIP funds. The World Bank granted a \$20 million emergency concessionary loan to Georgia to cover the rehabilitation and improvement of municipal services, inter alia, to the coastal cities of Batumi and Poti. The loan also includes provisions for coastal zone management along the Georgian Black Sea coastline.

(2) A second component of the World Bank-implemented programme was the development of a *Priority Investment Plan* as a component of the BS-SAP. It was designed as a strategic framework for assessing the costs and benefits of actions aimed at ameliorating the environmental degradation of the Black Sea.

Faced with the concern that little progress had been made in the implementation of this component, it was proposed to the World Bank that the tasks be split between the two organizations, the BSEP-PCU and the World Bank. Agreement was reached in late 1995 and very thorough and comprehensive Terms of Reference were prepared to launch the activities. The renamed Black Sea Environmental Priority Study (BSEPS) was to be composed of six national reports and six independent technical report. At the time of writing of this report, the status of completion of the reports is as follows:

<i>BSEPS Reports</i>	<i>Status</i>
6 country reports	draft under review
Regional synthesis report	n/a

An economic analysis of BS Fisheries and Env. Management	draft
Technical report on coastal erosion	semi-final
Economic assessment of coastal erosion in the BS coastal countries	in preparation
The study of the impact of economic transition on the BS countries environment	initial draft
Technical support for estimating the economic value of reduced risks to human health in BS coastal areas	draft under review
Tourism related economic value of environmental quality of the BS	final
Economic valuation of BS coastal wetlands	initial draft

Because the BSEPS effort was initiated rather late in the implementation of the Programme (activities started in late 1995), few of the reports could be completed by the time of the planned end date of project RER/93/G31 (June 1996) and could contribute to the preparation of the BS-SAP. As a result, it was then decided to extract those components of particular relevance to the preparation of the TDA and the BS-SAP, the “hot spots reports”, and first concentrate on their review and analysis. The tourism report was also finalized in time for incorporation into the TDA and BS-SAP.

All the reports are expected to be finalized in Spring 97, when the main impulse for the preparation of the national BS-SAP will start.

When finalized, even not to its full extent, the set of national and technical reports clearly will constitute a “useful contribution for the development of a reasonable prioritization procedure²⁷”. The national reports, including the “hot spots reports”, will translate into a prime source of input for the preparation of the national Black Sea Strategic Action Plan, though they can not be relied upon in terms of priority investment portfolio as originally anticipated. The technical reports are of variable quality but have the potential to provide very valuable information on linkages between environmental and economic issues.

(3) *Investment plans for the enhancement and conservation of biodiversity and fisheries* were to be prepared under the Programme and a draft biodiversity investment plan was drafted in late 1996 (though in need of full revision). On the fisheries side however, the political positions of the respective Black Sea countries and the depressed economic situation of the fisheries industry as a whole made it inadequate to undertake such a task within the framework of this GEF project. Reasonably, the BSEP focused its activities rather on the assessment of fish stocks and the consolidation of existing data (see fisheries section in 2. 5 above). Investment emphasis was put rather on the potential of the aquaculture industry. *Investments in improved, cost-effective technology* was not done per se, but occasionally covered under particular thematic activities.

(4) The role of *economic instruments* in managing environmental issues is expected to increase in the Black Sea countries as a result of 1) the transition to a market economy and the general trend toward less government intervention, 2) the demonstrated cost-efficient response of enterprises and households to economic instruments and 3) the collapse of the state revenue system, restrictive budgets and the need to create new revenue-raising mechanisms for environmental protection within the economies in transition.

The BSEP-PCU working group on environmental economics initiated a review of the use and potential of economic instruments in the Black Sea countries. A comprehensive workshop on the Use of Economic Instruments for Environmental Protection in the Black Sea and its River Basins was organized jointly by the PCU and the Danube River Basin Programme in December 1994.

²⁷ Project Evaluation Report, page 21

(5) Black Sea Regional Environmental Fund

The implementation of newly ratified legal and policy agreements requires a sustainable mechanisms of regionally-based financial support which does not rely upon haphazard voluntary contributions. This problem of financing the management of commons has bogged down regional programmes worldwide. Faced with the same issue, the BSEP proposed to study the development of an innovative option, a Black Sea Environmental Fund (BSEF). The proposed fund could be financed primarily through common economic instruments applied on a nation-by-nation basis across the region. Ranging from the use of such instruments as charges, penalties, taxes or subsidies to the creation of marketable permits, the Fund would rely on user-pays and polluter-pays principles, classic principles of international agreements and conventions. The BSEF would ensure the sustainability of international cooperation for the Black Sea by providing a source of financial support for activities and investments dealing with issues of international concern, which can not be dealt with by any single state.

Backed by the full support and technical contribution of the BSEP Environmental Economics working group, the BSEP-PCU offered to conduct a consultative process in the Black Sea countries to determine the interest of the Black Sea governments in the proposal. This was undertaken in late 1995, thanks to a grant from the GEF Bloc B (RER/95/G41). All governments confirmed their interest in the proposal and welcomed further investigation into the modalities for implementing the BSEF. This was reflected in the drafting of the BS-SAP. Also, the European Union's Phare and Tacis Programme has already strongly endorsed the concept of conducting a full evaluation of the Fund and have made budgetary provisions for parallel financing of this sub-objective. As a result, an in-depth feasibility study will be conducted in the second phase of the BSEP.

The investment component of the BSEP has associated traditional feasibility studies of priority investments with more innovative approaches using economic instruments. While the World Bank has been effective in initiating the portfolio of UIP and carrying out the pre-feasibility studies, other International Financing Institutions, such as EBRD, did not follow on the lead and consider with more interest the financing of some of these urgent investment projects. Considerable efforts remain to be done to convince the Financing Institutions of the merit of supporting Black Sea capital projects. The forthcoming national BS-SAPs and the tentative scheduling of a Donor/PPC meeting in the second phase of the Programme should help breach this gap. On the other hand, Black Sea governments would be taking a closer look at their internally-generated financial revenues which, if managed optimally, could contribute to the costs of some of these larger investment programmes for the protection of the Black Sea.

3.5. Developing the Black Sea Strategic Action Plan (BS-SAP)

The Black Sea Strategic Action Plan (BS-SAP) was the culmination of a carefully implemented technical process spanning over two years. The steps of this process were highlighted in Figure 1 on page 5 of this report. It relied on the joint work undertaken by international organizations (essentially UN agencies) and Black Sea institutes to establish and empower technical networks to prepare substantial thematic analysis and then integrate them regionally.

The first move in creating the BS-SAP was the completion of a systematic scientific analysis of the root causes of environmental degradation in the Black Sea. This analysis, termed a

Transboundary Diagnostic Analysis²⁸ was completed in June 1996. The TDA was prepared by a group of sixteen leading specialists, drawn from fourteen countries including all six Black Sea countries, together with the five PCU specialist staff. Together they analyzed the thematic reports based upon the work of over 100 Black Sea specialists cooperating through the BSEP network. Altogether these represent some 75 national assessment reports and 13 regional synthesis reports completed within the framework of the Programme. The results of this work were condensed into a series of analytical tables. The TDA then 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 and the uncertainties in the information describing the problem. 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.

On the basis of the TDA, the high-level representatives of Black Sea governments were able to negotiate a very pragmatic BS-SAP. The first draft of the BS-SAP was completed by the governmental representatives on 30 June 1996 and submitted to intensive review at the national level. Following two further meetings, the refined draft was ready for submission to the Ministerial Conference four months later, on 31 October 1996.

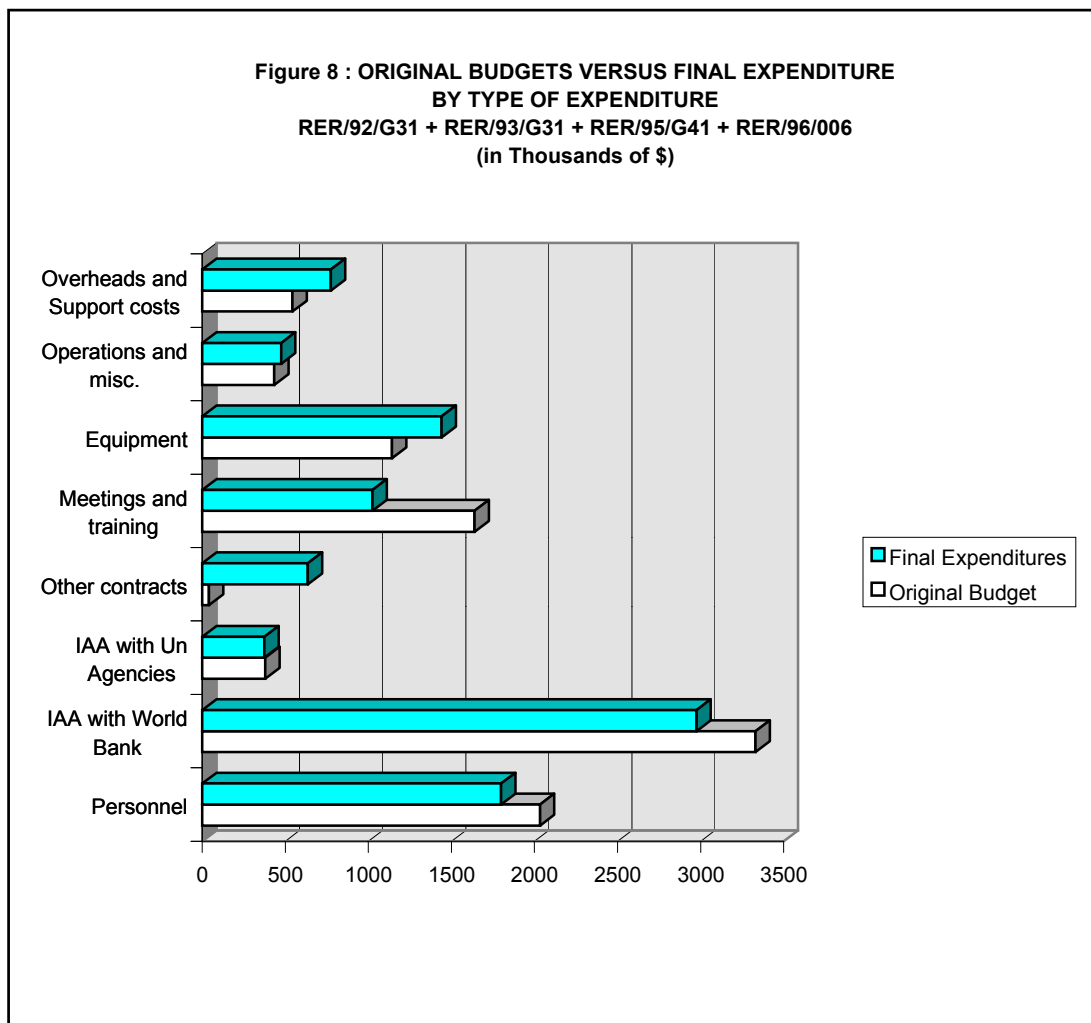
The BS-SAP is considered a truly innovative document, in which the governments of the Black Sea countries, together with the wider international community, commit themselves to a pragmatic programme of actions based upon common objectives and milestones for restoring and protecting the Black Sea. The next step in this process will be the preparation of national BS-SAPs, where country’s individual priorities, means and requirements will be considered within the framework of achieving the full implementation of the (regional) BS-SAP..

²⁸ Transboundary Diagnostic Analysis, BSEP-PCU, June 1996

PART IV FINANCIAL MANAGEMENT

To be consistent with the general approach of this final report, financial data for the four projects have been combined, when reviewing the distribution of the budget into the various clusters or thematic components. Also, for this report, “Final Expenditures” represent final expenditures as accounted by UNOPS but reworked in the correct budget lines and budgetary years to reflect a more accurate cost of the project activities in line with the programming of the BSEP-PCU. In addition, for 1996, the best estimates available have been taken into account, in particular for BSEP-PCU activities and for personnel costs, as no final figures are yet published. The present review has finally assumed that all UN agencies (and the World Bank) would deliver 100% of the amounts committed in their Inter-Agency Agreement(s) with the UNOPS, the balance being disbursed in 1996.

5.1 Review of the Programme financial results by budget clusters or categories.

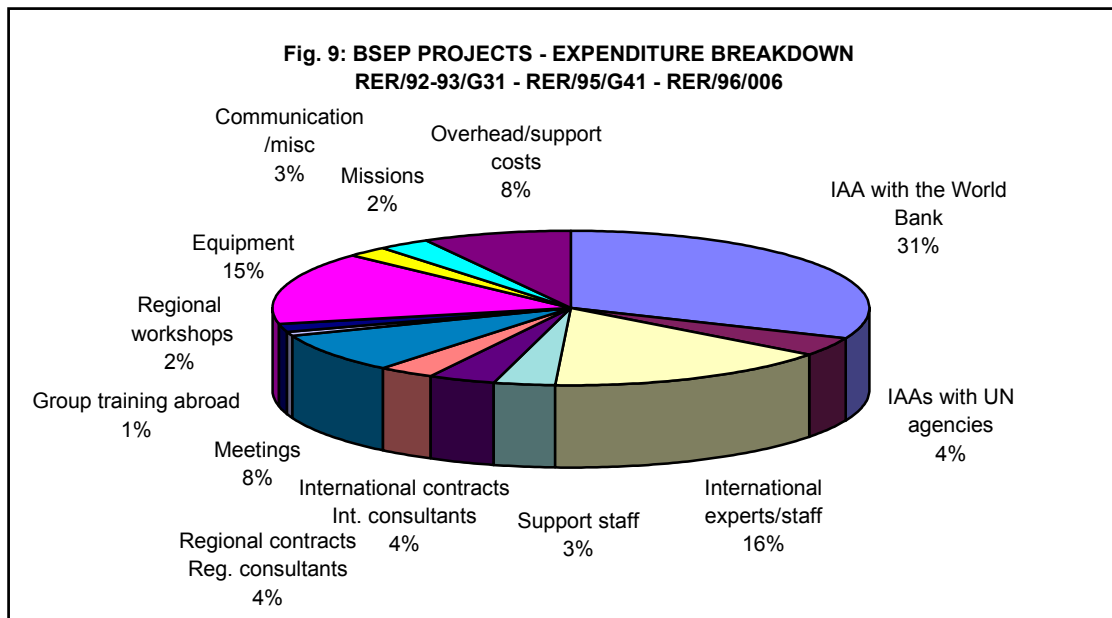


A comparison of original budgets with final expenditures points to the following conclusions:

- Personnel costs were slightly lower than expected - this is possibly attributable to the cost-effective use of young professionals at the PCU, the reliance on the contracting of Black Sea

experts as much as possible for undertaking temporary and specific tasks, and the provision of a Junior Professional Office from the Government of Japan.

- The effort on equipment, as mentioned above (section 1.1) turned out to be more costly. The increase, inter alia, also stems from storage costs at customs and levies.
- The IAA with the World Bank was decreased by \$355,000 in 1996 to account for the transfer of responsibilities to the BSEP-PCU, i.e. in the area of fisheries (\$100,000), ICZM (\$5,000) and BSEPS (\$250,000).
- The dollar amount disbursed for meetings and events was considerably lower than budgeted for. This may come as a surprise in view of the extremely high number of events organized by the Programme, but it is the result of carefully and optimally budgeting for each of these activities. Bloc room reservations were negotiated by the PCU with the hotel and reduced DSA rates then granted to the participating experts, the lowest travel routes and tickets were used and meeting expenses were kept to a minimum. As a result, a meeting cost I average about \$8,000 for some 10 to 15 participants (duration of a meeting is usually 3 to 4 days).
- Overhead and support costs increased from \$544,473 to \$773,829.
- Contracts, not originally foreseen in the original project document, turned out to be used regularly at the BSEP, to recruit the services of international but mostly Black Sea experts.



Looking at the share of each categories of expenditure in the overall total, three components stand out: IAA with the World Bank at 31% of the total (\$2,975,000), international PCU staff personnel cost at 16% (\$1,491,207) and provision of equipment at 15% (\$1,440,000).

In dollar amount, the share of international contracts (including the recruitment of international consultants) versus regional (Black Sea) contracts is similar at 54-46.

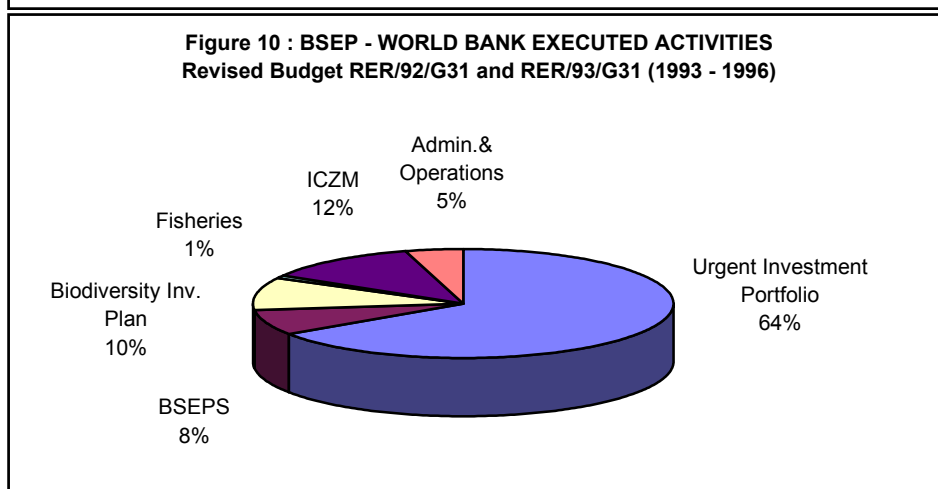
The corresponding table from which these figures are derived is attached in Annex 8. When international PCU personnel costs are redistributed into those thematic areas in which they provide input and expertise,

5.2 Distribution of the budget by thematic areas

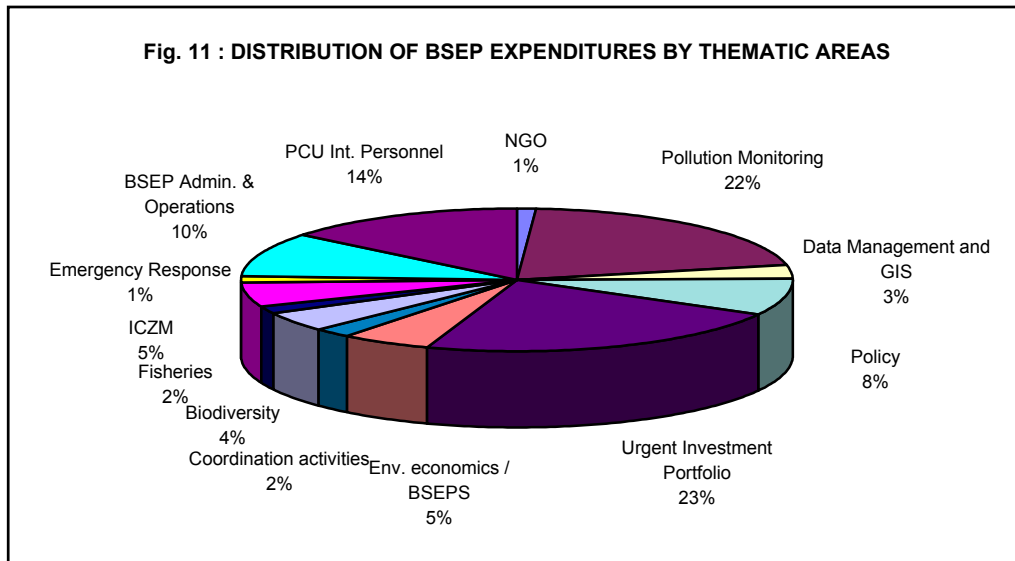
Following the distribution of responsibilities and tasks at the PCU, the expenditures have been re-allocated per thematic areas, i.e. Emergency Response, Pollution Monitoring, Biodiversity, ICZM, Fisheries, Data management and information, Environmental economics, Urgent Investment Portfolio, NGOs, Policy, and Coordination (essentially missions to the Black Sea countries).

The distribution of the World Bank IAA follows the table below which is taken from the most recent budget revision of the World Bank dated June 1996.

BSEP World Bank component	
Black Sea Environmental Priorities Study (BSEPS)	225
Biodiversity Investment Plan	290
Fisheries	22.7
Coastal Zone Management	355
Administrations and Operations	135
TOTAL (in Thousand of \$)	2,975



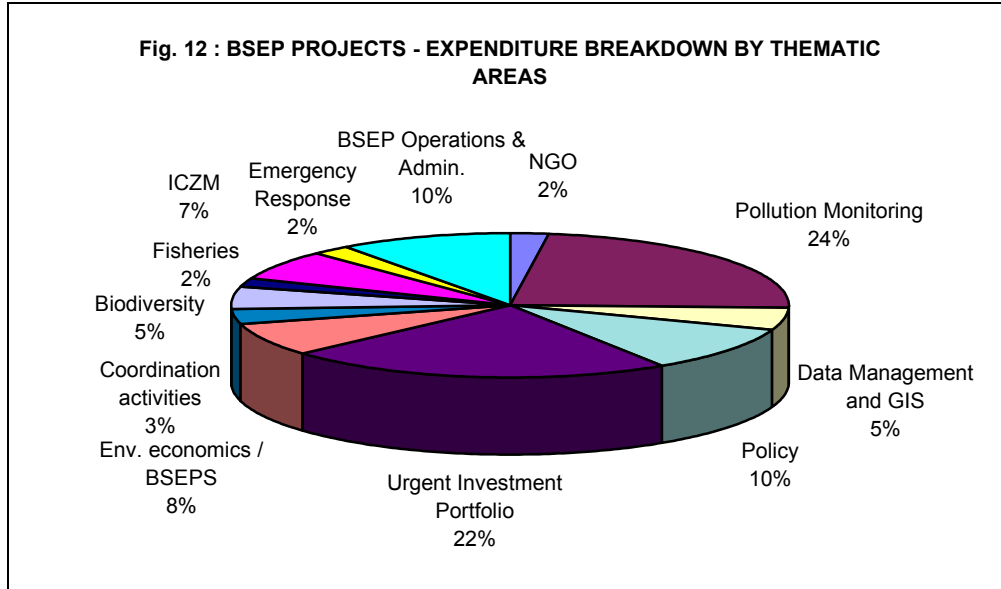
In the first figure below (Figure 11), the operating cost of the PCU has been split into: PCU international personnel costs and BSEP Administrative and Operations costs (this includes PCU communication, supplies, local staff, equipment and miscellaneous costs as well as the World Bank Administrative expenses).



The UIP and the Pollution Monitoring thematic areas accounted for respectively 23% and 22% of the overall delivery, the highest share of the Programme. Indeed, both were probably the most critical components of the BSEP, the UIP for it responded to the need to remedy urgent environmental problems at the start of the Programme, the pollution monitoring for the BS-SAP had to rely on a fresh, accurate and coherent set of data, collected with up-to-date equipment. The UIP is a fully-funded World Bank component, the Pollution Monitoring area includes such significant expenditures as the procurement of analytical equipment, IAAs with UN agencies (WHO, IAEA and IOC of UNESCO) together with the usual meetings and contracts.

Apart from the policy component whose share increased over the past year to 8% because of the effort on the BS-SAP, all other BSEP thematic components account for a similar modest share of the budget between 1 and 5%.

In the second figure below (Figure 12), the PCU international personnel costs have been redistributed into those thematic areas for which the respective officers have provided inputs and technical expertise. Since the BSEP-PCU did not record staff time against the projects and activities undertaken, the distribution is based upon the terms of reference of the officers and a best estimate of their time sharing among the various thematic areas and activities.



The redistribution of PCU international technical expert costs into thematic areas increased slightly the percentage share of each of the thematic areas, to the exception of the Fisheries component. However it is important to note here that the Fisheries officer was a direct cost-sharing contribution from the Government of Japan and at no cost to the Programme.

BSEP Administration & Operations costs amount to 10% of the total Programme.

5.3 Inter-Agency Agreements

For the implementation of this Programme, the BSEP concluded Inter-Agency Agreements (IAAs) with the World Bank, the IMO for the emergency Response component, the FAO for the Fisheries component, and the IAEA, the WHO and the IOC of UNESCO for the Pollution Monitoring component. Very few data have been provided to the BSEP-PCU regarding the detailed expenditure use of these amounts in the course of the Programme.

There is also a note of concern, at the time of writing, in that only about half the total amount of the IAAs has been reported (\$1,734,005 against a revised total amount of \$3,375,000 - see table of IAAs in Annex 9). It is understood though that these amounts have been fully committed and it is expected that the agencies will be reporting full expenditure against their Agreed amount before the financial closure of the Programme.

On the assumption that the UN agencies and the World Bank eventually report full expenditures against their IAAs, the Programme will have attained a 100% implementation rate, since final expenditures for the full Programme (RER/92/G31, RER/93/G31, RER/95/G41 and RER/96/006) will amount t \$9,498,626 against a total budgeted amount of \$9,543,762 (not taking into consideration the direct cost-sharing from the French Government). Financially, it can be said that the Programme has fulfilled its objectives and, with regards to the number of activities implemented, very cost-effectively managed the total budget allocated.

PART V CONCLUSIONS AND FOLLOW-UP

The contributions that have been made by the BSEP in terms of capacity building, thematic outputs, investment identification and policy development but also in terms of regional and national cooperation have made a real difference in the environmental management capabilities of the Black Sea countries and have laid the first foundation for implementing a strong Bucharest Convention.

The successful implementation of the Programme essentially results from:

- the full involvement of the Black Sea country governments in the design and management of the Programme, including financial planning and review on an annual basis;
- the application of both “top-down-bottom-up” approach, which balanced the role of central and local authorities with that of the general public;
- the reliance on regional expertise with limited use of foreign experts, only in areas of critical policy issues;
- the establishment and development of networks, using local resources and infrastructure;
- an emphasis on on-the-job training which encourages the formation of local teams, rather than on the training of individuals who may easily be lost to the network;
- the constant on-line communication with experts, to guide and facilitate their work;
- the downloading of portions of the work programmes to Black Sea institutions, thereby enhancing their “ownership” of the Programme;
- the design of parallel funding packages which donors can contribute to, thereby adding value to the GEF initial investment and receiving visible credit for their assistance;
- the development of innovative concepts for financing future actions;
- the final preparation of an excellent technical analysis (TDA) and policy document (BS-SAP), and
- the coordinated technical assistance of UN agencies.

On the other hand, a second GEF phase of the Programme has recently been approved for a one-year \$1.7 million, after a long and difficult period of preparation and endless revisions. This next step will essentially provide for the development of national Black Sea Strategic Action Plans. It will support institution building at the national and regional level for the design and implementation of such plans and will seek to foster greater public involvement in the process. Finally it will develop an investment portfolio for the elimination of hot spots and for other actions for supporting the implementation of the BS-SAP. The four immediate objectives of the second phase Programme are as follows:

- consolidation of the policy strategy to implement the Black Sea Strategic Action Plan
- preparing the technical implementation of the Black Sea Strategic Action Plan
- public involvement in the implementation of the Black Sea Strategic Action Plan
- developing the financing of the Black Sea Strategic Action Plan

After this second phase, the future of the Programme and the sustainability of its achievements will rely on two factors:

1) the capacity of the Istanbul Commission to carry the process further. This will require increased political will and commitment from the Black Sea countries but also will necessitate a continued support from the international community to guarantee that institutions are able to maintain the level of monitoring activities for surveys and pilot studies, have the means to sustain an active network and can become real “Advisory Centres” , i.e. centres of competence, for the Istanbul Commission.

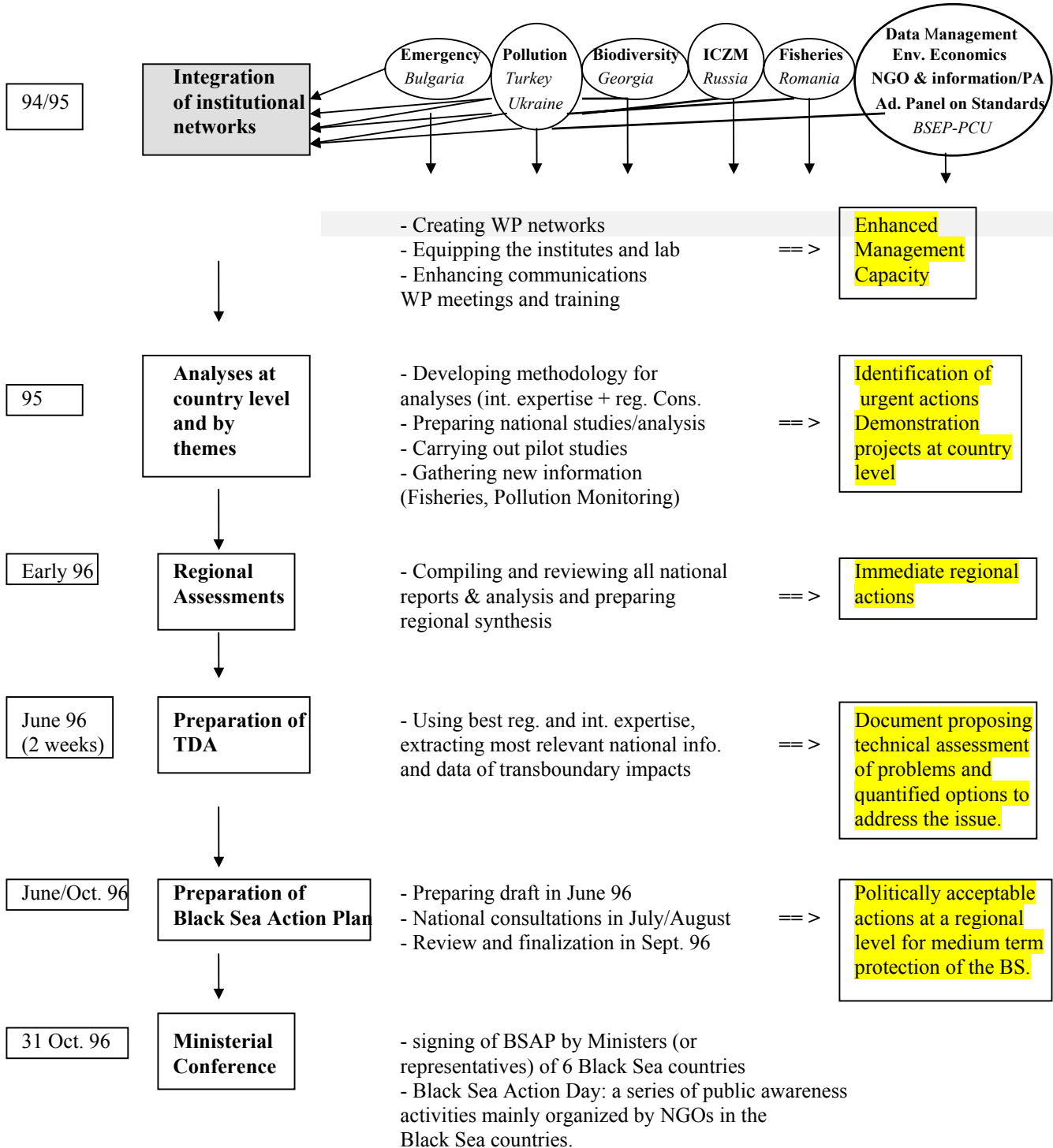
2) the development of a basin-wide approach for the control and reduction of significant sources of pollution. “Over 70% of the nutrients, the primary sources of eutrophication which has severely damaged the Black Sea ecosystem, enter the Black Sea via international rivers²⁹”.

²⁹ BSEP Transboundary Diagnostic Analysis, June 1996

PART VI LESSONS LEARNED AND RECOMMENDATIONS

BSEP Process for preparing a Strategy for a Medium / Long term Environmental Action Plan (Black Sea Action Plan)

Thematic areas / Activity Centres



LIST OF ANNEXES

- 1. Institutional set-up of the Black Sea Environmental Programme**
- 2. Original project budgets versus final expenditures**
- 3. Contracts (International & Regional)**
- 4. Donors support to the Black Sea Environmental Programme**
- 5. Assessment of the outputs of the Programme**
- 6. List of BSEP events**
- 7. List of BSEP Publications**
- 8. Budget of the World Bank component of the Programme**
- 9. BSEP Final Expenditures by thematic areas and by budget categories**
- 10. Inter-Agency Agreements with UN agencies**

Annex 2 - Original project budgets versus final expenditures

RER/93/G31	ORIGINAL PROJECT BUDGETS				
RER/92/G3 +RER/95/G41 + RER/96/006					
	1993	1994	1995	1996	Total
Personnel	\$228,333	\$630,000	\$642,268	\$532,501	\$2,033,102
Subcontract	\$170,000	\$987,000	\$1,765,000	\$828,000	\$3,750,000
World Bank	\$60,000	\$827,000	\$1,655,000	\$788,000	\$3,330,000
IAA with UN Agencies	\$110,000	\$160,000	\$110,000	\$0	\$380,000
other contracts	\$0	\$0	\$0	\$40,000	\$40,000
Meetings and training	\$174,666	\$574,000	\$496,882	\$394,334	\$1,639,882
Equipment	\$949,000	\$70,000	\$70,000	\$53,000	\$1,142,000
Operations and misc.	\$49,732	\$138,195	\$158,415	\$87,963	\$434,305
Total	\$1,571,731	\$2,399,195	\$3,132,565	\$1,895,798	\$8,999,289
Overhead / Support costs (6%)	\$94,304	\$143,952	\$188,862	\$117,355	\$544,473
Grand Total	\$1,666,035	\$2,543,147	\$3,321,427	\$2,013,153	\$9,543,762

REVISED BUDGET AS PER FINAL EXPENDITURES

	RER/92/G31	1993	1994	1995 (1)	1996 (2)
Personnel	317,441	25,067	418,097	531,473	507,126
Subcontract	35,000	21,168	769,932	754,012	2,404,581
World Bank	35,000	21,168	478,412	426,040	2,014,380
IAA with Un Agencies		0	166,853	114,975	92,511
other contracts		0	124,667	212,997	297,690
Meetings and training	69,387	64,960	352,526	364,622	173,515
Equipment		174,357	681,750	554,545	30,237
Operations and misc.	38,811	40,641	88,275	173,118	134,156
Total	460,639	326,193	2,310,580	2,377,770	3,249,615
Overhead / Support costs	27,639	41,654	232,424	275,728	196,384
Grand Total	488,278	\$367,847	\$2,543,004	\$2,653,498	\$3,445,999
Cost-sharing from France	0	\$0	\$0	\$0	33,910
Grand Total for GEF/UNDP	488,278	367,847	2,543,004	2,653,498	3,412,089

(1) 1995 figures include real expenditures for RER/95/G41

(2) 1996 figures include real expenditures for RER/96/006

Annex 3 - Black Sea Environmental Programme - Contracts (International & Regional)

BSEP CONTRACTS (1993-1996) RER/93/G31						
Number		Organisation	Country	Th. Area	Year of payment	Amount
NGO						
C-95639	contract	CRAEP	UKR	NGO P/A	95	\$3,000
C-95618	contract	GYEM (Dartsimelia)	GEO	NGO P/A	95	\$2,994
C-95508	contract	GESS (Catalin Gheorghe)	ROM	NGO P/A	95	\$2,758
C-95602	contract	Ecoglasnost Varna (R. Peteva)	BUL	NGO P/A	Nov-95	\$2,962
C-95510	contract	RAREF (Y. Caglar)	TUR	NGO P/A	95	\$3,000
SSA94-16171	NPPP	L. Matenco (NGO Directory 1995)	ROM	NGO Dir	Aug. 95	\$4,100
Proc.	proc.	L. Matenco (NGO Directory 1996)	ROM	NGO Dir	Aug. 96	\$4,750
SSA	NPPP	Black Sea Action Day (*)	BUL	NGO P/A	Oct. 96	\$3,000
SSA	NPPP	Black Sea Action Day (*)	GEO	NGO P/A	Oct. 96	\$5,000
SSA	NPPP	Black Sea Action Day (*)	ROM	NGO P/A	Oct. 96	\$3,000
SSA	NPPP	Black Sea Action Day (*)	RUS	NGO P/A	Oct. 96	\$3,000
SSA	NPPP	Black Sea Action Day (*)	TUR	NGO P/A	Oct. 96	\$3,000
SSA	NPPP	Black Sea Action Day (*)	UKR	NGO P/A	Oct. 96	\$3,000
						\$43,564
BlackSIS						
C-95625	contract	Russian Academy of Sciences (Shiganova /Vinogradov)	RUS	blacksis	95	\$1,500
C-95624	contract	IBSS (Alexandrov)	UKR	blacksis	96	\$1,200
C-95623	contract	RMRI (Nikolaev)	ROM	blacksis	Oct-96	\$1,000
	proc	Ukr Sc. Center of the Ecology of tho Sea (Ivanovich / Mikhailov)	UKR	blacksis	95	\$1,000
	proc	Bul. Academy of Sciences (Konsulov)	BUL	blacksis	95	\$1,500
NSC-95-12647-0	NPPP	Jaoshvili (NPPP)	GEO	blacksis	95	\$1,000
NSC-95-12646-0	NPPP	Adeishvili (NPPP)	GEO	blacksis	95	\$1,000
NSC-95-12801	NPPP	Todorov (NPPP)	BUL	blacksis	95	\$1,000
C-951311	contract	GYEM (Boris Pichkhadze)	GEO	blacksis	95	\$800
NSC 95-12542	NPPP	Adriana Pienaru	ROM	blacksis	95	\$400
SSA 95-13118		Huseyin Tekin	TUR	blacksis	95	\$1,000
SSA 95-13172		Andrej Buryakovsky	UKR	blacksis	95	\$1,100
SSA 95-13001		Andrej Buryakovsky	UKR	blacksis	95	\$400

SSA 95-12801		Vassil Nikolov Todorov	UKR	blacksis	95	\$1,000
SSA 95-13731		Alexander Petrosyan	RUS	blacksis	95	\$1,000
C-96402	contract	A. Suvorov	UKR	blacksis?	96	\$1,700
						\$15,400

GIS

C-95221	contract	Rom. Center of Marine Geology and Geocology (Nicolae Panin)	ROM	GIS	95	\$7,500
C-941351	contract	Marine Hydrophysical Institute (L. Ivanov)	RUS	GIS	Apr-95	\$5,500
C-941349	contract	Moscow State univ. (Oleg Musin)	RUS	GIS	94-95	\$26,000
Amendment	contract	Moscow State univ. (Oleg Musin)			96	\$20,000
C-941350	contract	Fed. Res. Ins. of Fisheries (V. Babayan)	RUS	GIS	95	\$4,200
C-96393	contract	IBSS (Boris Alexandrov)	UKR	GIS	Oct-96	\$4,500
						\$67,700

Pol. Mon. - LBS

C-95806	contract	Hydromet (Diasamidze)	GEO	LBS Geo	95	\$3,000
C-95620	contract	19 Mayıs Univ. (H. Buyukgungor)	TUR	LBS Tur	95	\$6,500
C-95603	contract	RMRI (Radu Mihnea)	ROM	LBS Rom	95	\$3,000
C-95601	contract	Ukr Sc. Center of the Ecology of the Sea (Denga)	UKR	LBS Ukr	95	\$5,000
C-95509	contract	ITU (Regional Rapid Asses.) - D. Orhon	TUR	LBS Reg	95	\$12,000
C-95	contract	Res. Ins. of Shipping (Ivanov)	BUL	LBS Bul	95	\$3,000
C-95	contract	Krasnodar (Doroshenko)	RUS	LBS Rus	95	\$3,000
						\$32,500

Pol. Mon. - Misc.

C-95619	contract	Bogazici Univ. (Nilsun Ince) -Biossay Techniques Workshop (Ist., April 95)	TUR	Pol Mon	95	\$15,000
C-951207	contract	Univ. of Sydney (Prof. Underwood) - Training on Experinmental Design for BS Monitoring, Odessa October 95	Australia	Pol Mon	96	\$20,000
C-95981	contract	Ukr. Sc. C. of the Ecology of the Sea (Mikhailov) - Asses. of contamination of Ukr. CZ (research vessel)	UKR	Pol Mon	11/95 - 96	\$20,000
C-96176	contract	ACOPS	UK	Meeting	96	\$15,000
						\$70,000

ICZM - Tourism

C-95984	contract	Dampo Planning (Remzi Sonmez)	TUR	Tourism	95/96	\$2,000
C-95985	contract	Caucasian Club (VanoVashakmadze)	GEO	Tourism	95/96	\$2,000
C-95986	contract	IBSC Bulgaria (Radul Kovatchev)	BUL	Tourism	95/96	\$2,000
C-95988	contract	MEP Kiev (Tamara Panchenko)	UKR	Tourism	95/96	\$2,000
C-95989	contract	Research Ins. for Tourism (Cristian Diaconescu)	ROM	Tourism	95/96	\$2,000
C-951313	contract	REINFO (Serguey Shuklin)	RUS	Tourism	95/96	\$2,000
C-95987	contract	Krasnodar Region (Nikolay Shishkov)	RUS	Tourism	contract cancelled	
						\$12,000

Eco/BSEPS

SSA 94-16281	SSA	Zsuzsa Lehoczki	Hungary	Eco	94	\$1,500
SSA 95-15477	SSA	Zsuzsa Lehoczki	Hungary	Eco	Ap. 95	\$3,400
SSA-94-16274	SSA	J. Shogren - Vienna workshop	USA	Eco	94	\$10,000
C-951206	contract	Ecos Sochi (Oleg Rybak)	RUS	BSEPS	95	\$1,250
C-95974	contract	Ecos Sochi (Olga Maiboroda)	RUS	BSEPS	Aug-95	\$7,500
C-951468	contract	EcoPlus	POL	BSEPS	Feb. 96	\$95,000
C-961235	contract	Center for Eco.Design (M. Sertel)-erosion	TUR	BSEPS	Dec. 96	\$4,500
C-96182	contract	METU (Unluata)-eco. aspects of Fisheries	TUR	BSEPS	Feb-96	\$3,500
SSA-96-14874	SSA	Ivar Strand (D. Knowler SSA96-14116)-fisheries	USA	BSEPS	jan. 96	\$15,000
C-961174	contract	Medconsult-hot spots	TUR	BSEPS	Sept. 96	\$5,000
SSA	SSA	Ing Marie Gren -wetlands	SWE	BSEPS	96	\$12,000
SSA	SSA	Gardner Brown-Tourism	USA	BSEPS	96	\$30,000
S	NPPP	Panin -erosion technical	ROM	BSEPS	96	\$2,500
S	NPPP	Kosyan -erosion technical	RUS	BSEPS	96	\$2,500
						\$193,650

Publication/edition

SSA 95-15410	NPPP	Rachel Lewis		Editing	95	\$3,500
SSA 95-15409	NPPP	George Balashov - Translation of WHO guidelines	BUL		95	\$1,500
SSA 95-15408	NPPP	Radu Mihnea - Translation of WHO guidelines	ROM		95	\$1,500
SSA 94-15542	NPPP	Gareth Jenkins		Newsletter	95	\$3,000
SSA 95-15225	NPPP	Gareth Jenkins		Newsletter	95	\$2,700

SSA 95-13299	NPPP	Gareth Jenkins		Newsletter	95	\$4,500
SSA 94-13297	NPPP	Alexy Triumphov		Newsletter	95	\$1,200
SSA 95-13598	NPPP	Alexy Triumphov		Newsletter	95	\$2,750
SSA 95-12293	NPPP	Alexy Triumphov		Newsletter	95	\$2,750
SSA 95-13298	NPPP	David Millingen		Exhibit	95	\$3,500
NSC 95-12348	NPPP	Inna Soltys	UKR	Transl.	95	\$1,500
SSA-94-15676	SSA	Daan Everts	USA	Assistant	94	\$5,250
SSA-94-15926	SSA	Nilufer taspinar	USA	Assistant	94	\$1,650
SSA-95-16113	SSA	Nilufer taspinar	USA	Assistant	95	\$8,000
SSA-96-14054	SSA	Nilufer taspinar	USA	Assistant	96	\$8,100
						\$51,400

Biodiversity

SSA 94-15815	SSA	Andrew Greenwood	UK	Biod.	95	\$2,375
SSA-	SSA	Luisa Leu	BRA	Biod.	94	\$1,950
						\$2,375

Policy/Legal

SSA 95-15376	NPPP	Prof. Alexander Vysotsky	UKR	Legislation	95	\$1,500
SSA-94-16022	SSA	Netty Baartman	NL	Legislation	94-95	\$8,800
SSA-95-15335	SSA	Netty Baartman	NL	Legislation	95	?
SSA-	SSA	H. Dumont, Melvasalo, Wanninger - evaluation	BEL	Evaluation	95	\$40,000
SSA-96-14724	SSA	H. Dumont - Biod. component of TDA	BEL	TDA	96	\$3,500
RLA-96-16092	RLA	E. Hey - Action Plan	NL	BSAP	96	\$11,875
SSA-96-14438	SSA	Hannah van Vonderen	NL	TDA	96	\$6,150
						\$71,825

Fisheries

SSA	SSA	David MacLennan	UK ?	Fleet	96	\$6,000
S-	NPPP	P. Kolarov	BUL	Fleet	96	\$1,400
S-	NPPP	A. Komakhidze	GEO	Fleet	96	\$750
S	NPPP	S. Nicolaev	ROM	Fleet	96	\$1,100
S	NPPP	E. Laudar	RUS	Fleet	96	\$1,500
S	NPPP	Y. Erdem	TUR	Fleet	96	\$4,000
S	NPPP	V. Shlyakhov	UKR	Fleet	96	\$2,500

		\$17,250
(*) RER/96/006	TOTAL	\$577,664

Annex 4 - Donors support to the Black Sea Environmental Programme

	1993-94	1995	1996	Total	Pipeline for 1997-99
Cost-sharing contribution					
France		\$38,000		\$38,000	
Japan		\$40,000	\$50,000	\$90,000	
<i>Subtotal</i>	\$0	\$78,000	\$50,000	\$128,000	\$0
Direct Parallel Contribution					
European Union	\$370,000	\$1,850,000	\$2,640,000	\$4,860,000	\$10,000,000
Austria		\$20,000	\$10,000	\$30,000	\$300,000
Canada	\$25,000			\$25,000	\$100,000
Norway	\$20,000			\$20,000	
Netherlands	\$200,000	\$200,000	\$200,000	\$600,000	\$500,000
UK Know How Fund			\$20,000	\$20,000	
Denmark					\$600,000
Switzerland					\$500,000
Japan					\$500,000
WHO			\$60,000	\$60,000	
UNEP			\$20,000	\$20,000	
IAEA			\$50,000	\$50,000	
WTO			\$20,000	\$20,000	\$50,000
<i>Subtotal</i>	\$615,000	\$2,070,000	\$3,020,000	\$5,705,000	\$12,550,000
Total Direct support to BSEP	\$615,000	\$2,148,000	\$3,070,000	\$5,833,000	\$12,550,000
Parrallel Contribution (Scientific research)					
NATO	\$1,000,000	\$1,000,000	\$2,000,000	\$4,000,000	
EU-EROS		\$1,000,000	\$1,000,000	\$2,000,000	
CoMsBlack		n/a	n/a	n/a	
In-kind support					
Turkey		n/a	n/a	n/a	n/a
Bulgaria, Georgia, Romania		n/a	n/a	n/a	n/a
Russia, Turkey, Ukraine		n/a	n/a	n/a	n/a
<i>Subtotal (estimate)</i>				\$4,200,000	

Annex 5- Assessment of the Outputs of the Programme

Annex 6 - List of BSEP events

Black Sea Environmental Programme Statistical Overview of Meetings, Training and Working Parties 1994, 1995 and 1996

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
I. Emergency Response	First WP, Varna	16/5/94 - 18/5/94	Working Party	9	9	MAP/IMO (REMPEC)	BSEP
	Second WP, Varna	24/10/94 - 26/10/94	Working Party	7	7	IMO	BSEP
	Maritime Safety and Protection, Istanbul	1/11/94 - 3/11/94	Meeting	20	3	IMO/ITU	Associate Activity
	Black Sea / Mediterranean Joint Training on Marine Pollution Response and Preparedness	6/10/95-14/10/95	Training	15	7	IMO/REMPEC	BSEP/REMPEC/ MoE Turkey
	Third WP, Istanbul	16/10/95-17/10/95	Working Party	8	8	IMO	BSEP
	Oil Spill Management Workshop, Istanbul	5/12/96-12/12/96	Workshop	1	1	BSEP	Shell Company of Turkey
II. Pollution Monitoring	BS Scientific Research Sponsors, Istanbul	6/1/94 - 7/1/94	Meeting	10	2	CEC,NATO, IOC, Danube	BSEP
	Oil Pollution Monitoring Workshop, Budapest	11/4/94 - 15/4/94	Training	8	5	DANUBE	Collateral Contribution
	First Joint Working Party, Odessa	3/5/94 - 6/5/94	Working Party	15	15	-	BSEP
	Workshop: Contaminents in Sediments, Lesbos	20/9/94 - 25/9/94	Expert Group	3	3	IAEA/MAP	Associate Activity
	EROS, Istanbul	22/11/94 - 24/11/94	Training	19	17	CEC	BSEP
	Harmonization of Methodologies, Istanbul	22/11/94 - 25/11/94	Training	22	22	WHO	BSEP
	IAEA Course on the Measurement of Radionuclides, Istanbul	14/11/94 - 25/11/94	Training	17	-	IAEA	Associate Activity
	Coordinated Research Programme, Istanbul	21/11/94 - 25/11/94	Training	13	-	IAEA	Associate Activity
	Second Routine Pollution Monitoring, Istanbul	15/12/94 - 16/12/94	Working Party	8	8	-	BSEP
	Second Special Pollution Monitoring, Odessa	6/12/94 - 8/12/94	Working Party	11	11	IOC	BSEP
Azov Sea Hydrodynamics and Water Quality Meeting, Delft	1/3/95 - 27/3/95	Working Party	3	-	The Netherlands	Associate Activity	

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
	Workshop on Alternative Bioassay Techniques suitable for Monitoring Toxicity in the Black Sea, Istanbul	26/4/95 - 28/4/95	Training	18	18	Bogazici University, Istanbul	BSEP
	Regional Seminar on Drinking Water Quality, Istanbul	24-/5/95 - 27/5/95	Seminar	18	18	WHO	BSEP
	Azov Sea Project Coordination Meeting, Rostov	14/6/95 - 16/6/95	Meeting	6	-	The Netherlands	Associate Activity
	Workshop on Biological Effects of Pollutants in the Black Sea, Plymouth	14/8/95 - 18/8/95	Training	18	18	IOC GEEP	BSEP/Plymouth Marine Laboratory
	Azov Sea Economy Meeting, Delft	30/8/95 - 1/9/95	Working Party	5	-	The Netherlands	Associate Activity
	Training Workshop on Cholera Control and Epidemiology, Odessa	11/9/95-13/9/95	Training	15	-	WHO	WHO/BSEP
	Training Workshop on Cholera Control and Water Supply, Odessa	14/9/95 - 15/9/95	Training	15	-	WHO	WHO/BSEP
	Training Workshop on Control of Drinking Water Quality, Odessa	18/9/95 - 20/9/95	Training	18	-	WHO	WHO/BSEP
	National Workshop on Recreational Waters and Beach Quality Monitoring, Sochi	11/9/95 - 15/9/95	Training	14	14	WHO	BSEP
	Training Course on Marine Geological and Geophysical Data Management,, Gelenzhik	13/9/95 - 29/9/95	Training	7	3	IOC, UNESCO	IOC
	Azov Sea DSS Preliminary Evaluation and Project Planning, Delft	9/10/95 - 13/10/95	Meeting	5	-	The Netherlands	Associate Activity
	Training Workshop on Experimental Design for the Black Sea Monitoring Programme, Odessa	16/10/95 - 27/10/95	Training	18	18	-	BSEP
	Training Course on Determination of Organic Contaminants, Odessa	27/10/95 - 10/11/95	Training	5	-	IAEA	BSEP
	Training Course on Determination of Trace Metals, Odessa	15/11/95 - 27/11/95	Training	7	-	IAEA	BSEP
	National Workshop on Recreational Waters and Beach Quality Monitoring, Batumi	30/11/95 - 2/12/95	Training	15	15	WHO	BSEP
	Black Sea Pollution Monitoring Workshop, Istanbul	18/3/96-22/3/96	Meeting	44		European Union/ NATO/ IMO/ WHO/ IAEA/ UNESCO/ Woods Hole/ Danube PCU	BSEP
	Technical Meeting on the Global Programmes of Actions, Geneva	26/09/96-27/09/96	Meeting	1	1	UNEP/ BSEP	UNEP
	Mussel Watch Training Workshops, Plymouth (UK), Odessa, Istanbul, Plymouth	20/09/96-25/09/96 (Odessa)	Training	7	7	IOC/UNESCO Plymouth Marine	BSEP

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtpts	# GEF financed Prtpts	Associated Donors/Agencies	Coordination
		12/10/96-13/10/96 (Istanbul)	Training	3	3	Laboratory	
		04/11/96-29/11/96 (Plymouth)	Training	3	3	TACIS	
	Workshop on Drinking Water Supply and Quality, Sinaia, Romania	22/04/96-27/04/96	Workshop		1		
	WHO Meeting in Ukraine						
III. Biodiversity	First Working Party, Istanbul	3/2/94 - 4/2/94	Working Party	19	19	-	BSEP
	Second Working Party, Batumi	16/10/94 - 18/10/94	Working Party	11	11	-	BSEP
	Third Working Party, Varna	4/7/95 - 7/7/95	Working Party	8	6	WB	BSEP
	Coordination Meeting with Wetland International, Slimbridge	11/01/96-12/01/96	Meeting	1	1	Wetland International	Wetland International/ BSEP
	Regional Wetland Workshop, Odessa	04/03/96-08/03/96	Workshop	25	1	PHARE/ TACIS	Wetland International
	Pan-European Biological and Landscape Strategy Meeting, Geneva	24/09/96-25/09/96	Meeting	3	1	Council of Europe/ UNEP/ IUCN	Council of Europe/ UNEP
	Negotiating Meeting on Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Area, Monaco	19/11/96-24/11/96	Meeting	25	1	UNEP/ Monaco	UNEP/ Monaco
	Coordination Meeting for the Preparation of the BS Red Data Book, Gland	26/11/96	Meeting	1	1	-	IUCN/ BSEP
	Executive Bureau Meeting for the Pan-European Biological and Landscape Strategy, Geneva	27/11/96-29/11/96	Meeting	3	1	Council of Europe/ UNEP	Council of Europe/ UNEP
IV. ICZM	First Working Party, Gelenzhik	15/6/94 - 17/6/94	Working Party	15	12	-	BSEP
	Lab Analysis and Info Management, Sofia	6/9/94 - 10/9/94	Training	18	3	CEC	Collateral Contribution
	Mangalia Training Workshop	7/8/94 - 20/8/94	Training	40	7	Canada	Collateral Contribution
	Sustainable Tourism In Coastal Zones, Odessa	23/9/94 - 27/9/94	Training	21	3	-	Associate Activity
	ICZM Coordinating Meeting, Istanbul	20/10/94 - 21/10/94	Meeting	10	5	WB,CEC, Holland	BSEP
	World Bank MIRP - Georgia ICZM (7 different activities in Tbilisi, Batumi, Kolheti)	3/1/95 - 12/31/95	Meetings/ Training	15 - 25 (per activity)	15 - 25 (per activity)	WB, WWF, ERM	WB

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
	Second Working Party, Novorossiysk	28/3/95 - 30/3/95	Working Party	20	12	WB	BSEP
	ICZM Methodology, Varna	22/5/95 - 25/5/95	Workshop	15	15	WB	WB
	Black Sea Coastal Environmental Project, First National Workshop, Constanta	22/5/95 - 26/5/95	Workshop	36	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, First National Workshop, Odessa	29/5/95 - 8/6/95	Workshop	42	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, First National Workshop, Gelendzhic	12/6/95 - 21/6/95	Workshop	33	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, First National Workshop, Varna	10/7/95 - 14/7/95	Workshop	21	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, First National Workshop, Tbilisi and Kobuleti	18/7/95 - 27/7/95	Workshop	25	-	Tacis/Phare	Tacis/Phare
	Medcoast Institute 95, Ankara/Marmaris/Fethiye/Capadocia	27/8/95 - 16/9/95	Training	2	2	Medcoast	Medcoast
	Black Sea Coastal Environmental Project, Second National Workshop, Krasnodar	28/8/95 - 1/9/95	Workshop	25	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, Second National Workshop, Constanta	4/9/95 - 8/9/95	Workshop	26	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, Second National Workshop, Varna	4/9/95 - 8/9/95	Workshop	20	-	Tacis/Phare	Tacis/Phare
	Inception/ preparatory Meeting for Launch of Sustainable Tourism Activity, Istanbul	4/9/95 - 5/9/95	Meeting/ Training	6	6	WTO, Austria	BSEP
	Black Sea Coastal Environmental Project, Second National Workshop, Tbilisi	12/9/95 - 16/9/95	Workshop	22	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, Second National Workshop, Odessa	3/10/95 - 7/10/95	Workshop	22	-	Tacis/Phare	Tacis/Phare
	Black Sea Coastal Environmental Project, Integrating Workshop, Odessa and Varna	7/10/95 - 18/10/95	Workshop	10	-	Tacis/Phare	
	Black Sea Coastal Environmental Project, Spain and UK Study Tour, Valencia and Peterborough	29/10/95 - 12/11/95	Study Tour	10	-	Tacis/Phare	
	Sustainable Tourism Seminar, Sochi	20/11/95 - 23/11/95	Meeting	10	6	WTO	BSEP
	International Workshop on Coastal Protection and Management	15/12/95					
	Third ICZM Working Party, Sochi	27/3/96-31/3/96	Working Party	14	15	WB PHARE/TACIS	BSEP
	Black Sea Sustainable Tourism Conference, Yalta	2/5/96-4/5/96	Conference	28	18	PHARE/TACIS Austrian Government BSEC, WTO	BSEP

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
	Medcoast Workshop, Sarigerme, Turkey	02/11/96-05/11/96	Workshop	24	9	BSEP/MAP	MED-COAST SECRETARIAT
V. Fisheries	First Working Party	27/4/94 - 29/4/94	Working Party	10	10	FAO	BSEP
	Aquaculture Study Mission	24/10/94 - 16/11/94	Meeting	10	10	Norway	BSEP
	Consultation for the Preparation of a Fisheries Convention, Constanta	13/10/94 - 15/10/94	Meeting/ Mission	22	1	World Bank, Turkey	Associate Activity
	Second Working Party, Constanta	26/10/94 - 28/10/94	Working Party	9	9	FAO	BSEP
	Second Meeting of the GESAMP Working Group on Opportunistic Settlers and Problem of Ctenophore <i>Mnemiopsis Leidy</i> in the Black Sea	20/3/95 - 24/3/95	Meeting	9	3	UNEP/IMO/FAO/ Unesco	UNEP
	Third Working Party, Constanta	29/6/95 - 1/7/95	Working Pary	7	5	FAO, UNEP	BSEP
	Second RAMS Meeting	24/10/95 - 26/10/95	Meeting	9	7	FAO	BSEP
	Fourth Working Party, Constantza	5/6/96-7/6/96	Working Party	14	9	FAO	BSEP
VI. GIS/DBM	Sea of Azov Workshop, Amsterdam	1/3/94 - 5/3/94	Meeting	12	1	Holland, CEC Comsblack	Collateral Contribution
	First Working Party, Istanbul	5/4/94 - 7/4/94	Working Party	9	9	-	BSEP
	Oceanographic Data Management, Obninsk	1/8/94 - 11/8/94	Training	17	1	-	Associate Activity
	Second Working Party, Moscow	5/9/94 - 7/9/94	Working Party	6	6	IOC of Unesco	BSEP
	Database Management Workshop, Istanbul	December /94	Training	12	12	Holland	Collateral Contribution
	Third Working Party, Bucharest	16/10/95 - 17/10/95	Working Party	7	7	-	BSEP
	Fourth Working Party, Moscow	13/5/96-15/5/96	Working Party	10	4	GRID/ UNEP	BSEP
	Workshop on the Evaluation of the Netherlands Contribution to the BSEP, Rostov-on-Don	16/04/96-18/04/96	Workshop	23	1	Netherlands	Delft Hydraulics/ BSEP
	Third Meeting of the Data Management, Sub-group	13/02/96-15/02/96	Meeting	3	1	Netherlands	Delft Hydraulics/ BSEP
VII. Economics & Investments	Environmental EconomicsExpert Group Meeting, Istanbul	13/6/94 - 15/6/94	Working Party	6	6	-	BSEP
	Priority Investment Programme Meeting,	9/2/94	Meeting	11	11	-	BSEP

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
	Istanbul						
	Economics Instrument Workshop, Vienna	13/12/94 - 15/12/94	Training	21	14	Danube	BSEP
	Environmental Economics Expert Group, Technical Sub-Group on Environmental Financing: Workshop on Establishing a Black Sea Environmental Fund, Istanbul	20/4/95 - 22/4/95	Workshop	5	5	-	BSEP
	Environmental Economics Expert Group Workshop to Launch the Black Sea Environmental Priorities Study, Istanbul	15/11/95 - 17/11/95	Workshop	5	5	-	BSEP
	National Consultation Meetings on Establishing a Black Sea Environmental Fund (Ankara, Constanta, Kyiv, Moscow, Sofia, Tbilisi)	15/9/95 - 22/11/95	Workshops	40	8	-	BSEP
	International Waters Task Force Meeting, Washington	26/11/96	Meeting			WB UNDP BSEP	WB GEF
	Meeting on the Appropriate Solid Waste Management Practices, Republic of Turkey	16/05/96	Meeting	30	1	WB/ Turkish Ministry of Environment/ Province of Trabzon	Turkish Ministry of Environment
VIII. NGOs	PHARE NGO Meeting, Varna	26/6/94 - 28/6/94	Meeting	22	1	CEC, NGOs	Collateral Contribution
	Preparatory NGO Meeting, Istanbul	2/10/94 - 7/10/94	Meeting	3	3	NGOs	BSEP
	Turkish NGO Forum Meeting, Ankara	5/10/94	Meeting	12	12	NGOs	BSEP
	International NGO Forum, Constanta	7/11/94 - 9/11/94	Meeting	18	18	NGOs	BSEP
	National NGO Forum Meetings (Ankara, Tbilisi, Constanta, Varna, Odessa, Sochi)	1/9/95 - 30/10/95	Meetings	(10-20)*6	(10-20)*6	NGOs	BSEP
	International NGO Forum, Gurzuf, Crimea	16/10/95 - 18/10/95	Meeting	30	12	NGOs	BSEP
	National NGO Forum Meetings, Varna, Constantza, Ankara, Tbilisi, Kerch	1/10/96-30/12/96	Meetings	(10-20)*5	(10-20)*5	NGOs	BSEP
IX. Coordination	Donor Coordination Meeting, Istanbul	21/4/94 - 22/4/94	Meeting	4	4	CEC, US, Austria, Canada, Holland	BSEP
	Steering Committee Meeting, Moscow	28/11/94 - 30/11/94	Meeting	26	26	-	BSEP
	Donor Coordination Meeting, Istanbul	14/11/95 - 15/11/95	Meeting	40	6	-	BSEP
	Inter-sectoral Coordinator meeting on htthe	3/96	Meeting	1	1	UNDP/ UNEP/ WB/	

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepts	# GEF financed Prtepts	Associated Donors/Agencies	Coordination
	Danube and Black Sea Regions, New York					BS & Danube PCUs	
	Meeting of international waters secretariats and ad hoc programme coordination units, Helsinki, Finland	29/01/96-30/01/96	Meeting	1	1	BSEP/ Danube PCU/ Govm. of Finland/ EC/ OsParCom/Rhine Com./UNOPS/WB//	HELCOM
	First Inter-Parliamentary Conference on the Environmental Protection of the Black Sea, Istanbul	10/07/96-12/07/96	Conference	80	2	BSEC/BSEC Council/UNDP/ Council of Europe/ Black Sea University/	PABSEC
	International Assembly on Ecological Safety of the Black Sea and Mediterranean, Gelenzhik	9/10/96-10/10/96	Meeting	78	2	BSEP/BSEC/ UNEP/UNESCO/ UNIDO /	Russian Foreign Policy Foundation/ Russian Federation and Krasnodar Region governments
X. Policy	National Coordination Contact Group, Istanbul	7/2/94 - 8/2/94	Meeting	11	11	-	BSEP
	BS Commission Prep. Meeting, Istanbul	6/4/94 - 10/4/94	Meeting	12	-	BSCOM	Collateral Contribution
	Europea Legislation & Policy, Kiev	17/4/94 - 19/4/94	Training	15	2	CEC	Collateral Contribution
	BSEC Conference on Sustainable Development and Environment, Tbilisi	28/9/94 - 29/9/94	Meeting	24	3	CEC, BSEC	Associate Activity
	National Coordinators Contact Group Meeting, Istanbul	17/10/94 - 18/10/94	Meeting	6	6	BSCOM	BSEP
	First Meeting of the Advisory Panel on the Harmonization of Environmental Quality Criteria, Standards, Legislation and Enforcement	10/4/95 - 14/4/95	Meeting/ training	11	11	-	BSEP
	First Meeting of the Commission on the Protection of the Black Sea, (Istanbul Commission) Varna	4/5/95 - 5/5/95	Meeting	17	11	Istanbul Commission	Istanbul Commission,
	Law Placement Programme, London	10/7/95 - 12/8/95	Training	8	2	Conservation Foundation	Conservation Foundation
	Regional Training Seminar on the Management of International Waters Programmes in Central and Eastern Europe, Istanbul	4/9/95 - 8/9/95	Training	6	-	-	BSEP
	Management Training for the BSEP Activity Centers, Istanbul	2/10/95 - 6/10/95	Training	12	12	-	BSEP
	Strategic Action Plan Technical Experts meeting, Istanbul	17/6/96-21/6/96	Meeting	10	9	WB/ UNEP/ UNDP/ WHO/ FAO/ IAEA	BSEP
	Strategic Action Plan Task Force Consulting	24/6/96-28/6/96	Meeting	14	14	UNDP/ WB/ UNEP/	BSEP

THEME	EVENT	DATES	Type of Activity	Total # of Black Sea Prtepnnts	# GEF financed Prtepnnts	Associated Donors/Agencies	Coordination
	Meeting, Istanbul					UNOPS	
	Strategic Action Plan Review Meeting, Istanbul	20/9/96-21/9/96	Meeting	14	14	UNDP/ WB/ UNEP/ UNOPS	BSEP
	Ministerial Conference, Istanbul	30/10/96-31/10/96	Meeting	22	14	UNDP/ UNOPS/ UNEP/ WB/ GEF/ FAO/ TACIS/ PHARE/ Danube Commission/ Mediterranean AP/ HELCOM/ OSPALCOM/ NATO/ IOC/ Switzerland/ Austria/ IAEA/ BSEC/ PAPSEC/ Medcoast	Government of Turkey/ BSEP
TOTALS	127 Activities			1,887	830		

Annex 7 - List of BSEP Publications**BLACK SEA ENVIRONMENTAL PROGRAMME
SIGNIFICANT PUBLICATIONS****A. EMERGENCY RESPONSE (BSEP/IMO)**

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Emergency response and Contingency planning in the BS region: current status and strategies for improvement.	BSEP/IMO	L. Stoyanov, J. Ostergaard et al.	30 Sept. 1995	Draft
ER Action Plan for the straits of Istanbul and the Western BS Territorial Waters of the Republic of Turkey following the Nassia Oil Tanker Accident	BSEP/IMO/ REMPEC		March 95	English/Turkish PCU Publ.
Regional Oil and Chemical Emergency Plan for the Black Sea	BSEP/IMO	-	n/a	Draft
Study of Oil Reception Facility	BSEP/TACIS/ IMO	-	-	Study underway
<i>Meeting reports</i>				
Emergency Response working party I, II, III	BSEP	-	1994-6	PCU Publ.

B. POLLUTION MONITORING

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Assessment of Pollution in the Black Sea	BSEP/IAEA/ WHO/EROS	L.D. Mee et al.	April 97	Draft
Land Based Sources of pollution surveys in all six Black Sea countries + regional synthesis	BSEP	-	1995/96	Drafts incorporated in TDA
Bathing waters regional assessment	BSEP/WHO	J. Bartram et al.	1996	Draft
Pollution pilot surveys in Bulgaria, Romania, Russia, Turkey and Ukraine	BSEP/CEC- EROS	-	1995/96	Drafts
<i>Meeting reports</i>				
Joint Pollution Monitoring working party meetings I, II and III	BSEP	-	1994-6	PCU Publ.
Proceedings of the GEEP workshop on biological effects of pollutants in the BS, Plymouth Aug. 95	BSEP	M. Moore	Oct. 95	PCU Publ.

C. BIODIVERSITY (BSEP/WB)

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Biodiversity Activity Centre, Batumi: a strategy for institutional sustainability	BSEP	L.D. Mee et al.	1994	Bound
Proceedings of the first international symposium on the marine mammals of the Black Sea	UNDP/Istanbul Uni./BSEP	B. Ozturk ed.	1996	Published
Regional Biodiversity Investment Plan	BSEP/World Bank	M.W. Wilson et al.	1996	Draft to be revised
Regional assessment of the Black Sea Biodiversity	BSEP	Yu. Zaitsev et al.	1996	Draft (to be published)

Romanian National Biodiversity report	BSEP	A. Petranu et al.	1996	Draft (to be published)
Bulgarian National Biodiversity report	BSEP	T. Konsulova et al.	1996	being edited
Georgian National Biodiversity report	BSEP	N. Mazmanidi et al.	1996	being edited
Russian National Biodiversity report	BSEP	S. Volovik et al.	1996	being edited
Turkish National Biodiversity report	BSEP	B. Ozturk et al.	1996	being edited
Ukrainian National Biodiversity report	BSEP	Yu. Zaitsev et al.	1996	being edited

Meeting reports

Biodiversity working party meetings I, II, and III	BSEP	-	1994-6	PCU Publ.
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D. ICZM

<i>Title</i>	<i>Funding/Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Bulgarian National ICZM report	BSEP	K. Galabov et al.	Dec. 95	semi-final
Georgian National ICZM report	BSEP	M. Dzeneladze et al.	1996	rough draft
Romanian National ICZM report	BSEP	I. Postolache, D. Diaconeasa et al.	Dec. 95	semi-final
Russian National ICZM report	BSEP	ICZM A.C.	Dec. 95	semi-final
Turkish National ICZM report	BSEP	R. Sonmez et al.	June 96	Final
Ukrainian National ICZM report	BSEP	A. Tkachov, A. Topchiev et al.	Dec. 95	semi-final
Regional ICZM report	BSEP	I. Kharitonov	June 96	semi-final
Manual and case studies of Black Sea coastal zone management (3 volumes)	CEC Phare - Tacis	Posford Duvivier et al.		Draft to be published
Regional Tourism Assessment (includes all 6 national Tourism reports + regional synthesis)	BSEP	Horwath Consulting (+ national consultants)	May 96	PCU Publ.
Yalta meeting report and recommendations	BSEP/Austrian Gov.	BSEP	July 96	PCU Publ.

Meeting reports

ICZM working party meetings I, II, and III	BSEP	-	1994-6	PCU Publ.
Conference for the development of sustainable tourism practices in the BS countries, Yalta May 96			May 96	PCU Publ.

E. FISHERIES

<i>Title</i>	<i>Funding/Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Fisheries leaflet: commercial fisheries in the Black Sea - Three years of decline	BSEP	L.D. Mee	1996	PCU Publ.
Environmental management of fish resources in the Black Sea and their rational exploitation	Soros Foundation/FAO/BSEP	K. Prodanov et al.	1995	Draft Being edited
Marine Aquaculture in the Black Sea region	BSEP/WB/Government of Norway	N. Svennevig et al.	1996	UN Publication
Analysis of fleet structure and performance in the Black Sea fisheries	BSEP	D. MacLennan et al.	1996	Draft being reviewed

Meeting reports

First meeting RAMS, Constanta Oct. 94	BSEP		Oct. 94	Draft
Fisheries working party meeting I, II	BSEP		1995-6	PCU Publ.

F. DATA MANAGEMENT / GIS

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Black Sea Information System	BSEP/Netherlands	V. Mamaev et al.	1996	Diskette internet
GIS	BSEP	BSEP et al.	Early 97	soon on CD-ROM
Black Sea Bibliography (1974-1994)	BSEP/Woods Hole	V. Mamaev, DG Aubrey, VN Eremeev	April 96	UN Publ. internet

Meeting reports

Data management and GIS working party meetings	BSEP	-	1994-6	PCU Publ.
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G. ENVIRONMENTAL ECONOMICS AND INVESTMENT

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
Sustainability and the international commons Establishing a BS Env. Fund			Dec. 94 1995	Working paper Draft-restricted Summary report
Proceedings of the workshop on the use of economic instruments for environmental protection in the BS and its river basin, Vienna, Dec. 94	BSEP/Danube P			Rough draft (to be published)
BSEPS country reports	BSEP		1996	Drafts being reviewed
BSEPS: An economic analysis of BS Fisheries and Env. Management	BSEP	D. Knowler, I. Strand, E. Barbier	1996	Draft
BSEPS: Technical report on coastal erosion - BSEPS: Economic assessment of coastal erosion in the BS coastal countries	BSEP	N. Panin, R. Kosyan N. Sertel		semi-final in preparation
BSEPS: The study of the impact of economic transition on the BS countries environment	BSEP	B. Fiedor	1996	initial draft
BSEPS: Technical support for estimating the economic value of reduced risks to human health in BS coastal areas	BSEP	S. Czaja, J. Dojlido, S. Takowski	1996	Draft being reviewed
BSEPS: Tourism related economic value of environmental quality of the BS	BSEP	G. Brown	1996	final
BSEPS: Economic valuation of BS coastal wetlands	BSEP	I-M. Gren	1996	initial draft

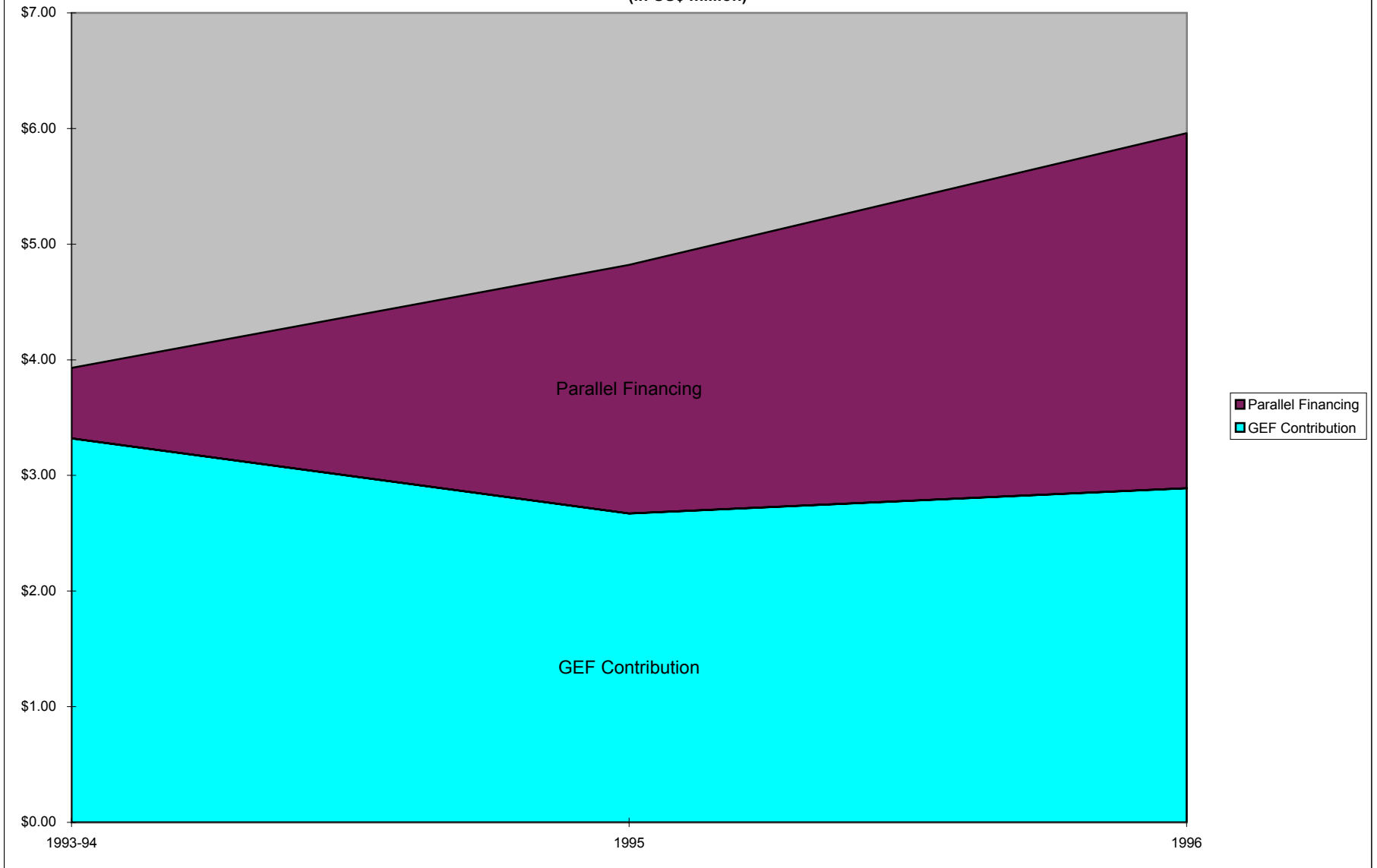
Meeting reports

Meetings of the Env. Economics experts group	BSEP	-	1994-6	PCU Publ.
BSEPS (TORs)	BSEP	-	April 95	PCU Publ.

H. NON-GOVERNMENTAL ORGANISATIONS / PUBLIC AWARENESS

<i>Title</i>	<i>Funding/ Sponsor</i>	<i>Author</i>	<i>Date</i>	<i>Status</i>
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Figure 7: FINANCING THE BSEP: GEF AND DONOR SUPPORT
(in US\$ million)



**ORIGINAL BUDGETS VERSUS FINAL EXPENDITURE
BY TYPE OF EXPENDITURE
RER/92/G31 + RER/93/G31 + RER/95/G41 + RER/96/006
(in Thousands of \$)**

