



**UNDP/GEF PROJECT ENTITLED “REDUCING ENVIRONMENTAL STRESS IN THE
YELLOW SEA LARGE MARINE ECOSYSTEM”**

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**Second Meeting of the Regional Scientific and Technical Panel
for the UNDP/GEF Yellow Sea Project**
Kunming, China, 15-17 December 2005

**PROJECT MANAGER’S REPORT ON
THE IMPLEMENTATION OF PROJECT ACTIVITIES**

1. Introduction

The year of 2005 has been a remarkable period for the UNDP/GEF Project entitled, “*Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem (YSLME)*” After several years’ negotiation and preparation, the project has finally reached the implementation phase.

Table 1 shows the situation at the beginning of 2005, and the current situation with regard to several aspects of project implementation. It is apparent that with close co-operation between the participating countries, United Nations Development Programme/Global Environment Facility (UNDP/GEF), UNDP Korea Office, United Nations Office for Project Services (UNOPS), and all the institutions involved in the project, the inception and implementation of the project have been successful.

Special appreciation should be extended to the government of Korea, in particular the Korea Ocean Research and Development Institute (KORDI) for its generous support in hosting the Project Management Office (PMO) within the KORDI compound, providing furniture and basic equipment, and allowing the PMO to use all facilities in KORDI.

Table 1. Situation of project implementation.

	<u>Beginning of 2005</u>	<u>Current Situation (end 2005)</u>
National Co-ordination	Not formally established	IMCC, NPCs National Working Groups, etc. established and fully functioning
Regional Co-ordination	Not formally established	PSC, RSTP, RWGs established, and fully operational.
Implementation	No action	Implementation plan approved, including budget
		Implementation mechanism established
		TDA preparation started

	<u>Beginning of 2005</u>	<u>Current Situation (end 2005)</u>
		agreements on data & info collection
		guidelines prepared (pollution monitoring, environment valuation)
		Co-operative cruises planned & agreed
		Historical & existing data collected
		GIS database designed
Financial operation	Through UNDP Korea Office	Fully operational by the PMO according to imprest account, and following UNOPS rules
Staff in PMO	Project Manager only	Fully-staffed PMO and functioning
Co-operation	No co-operation	MOU - WWF Japan/YSEPP
		MOU – WWF Hong Kong/China in initial stages
		MOU - WI signed
		MOU - NOWPAP discussed
		MOU - FAO discussed
		MOU – MSC in final stages
		'Yellow Sea Partnership' in public awareness - established
		IOC/WESTPAC discussed
		MOU – Sundosoft, Inc. – in initial stages

The relationship between the various components of the Project is shown in [Annex I](#).

2. Implementation of Project Activities

2.1 Official Inception of the Project

The UNDP/GEF Yellow Sea Project Document was approved by the governments of People's Republic of China in 2004 and Republic of Korea in 2003. In September 2004, the Project Manager was hired and the Project officially began its implementation phase.

The Official Launching Ceremony for the Project was held on 7th March 2005 in Seoul, Republic of Korea, at the Koreana Hotel. High-level officers from China and Korea and representatives from UNDP attended the Ceremony, and delivered congratulatory addresses. The speakers for the Ceremony were:

- **Mr. KANG Moo-Hyun**, Vice-Minister of Ministry of Maritime Affairs and Fisheries, Republic of Korea;
- **Mr. SUN Zhihui**, Deputy Administrator of the State Oceanic Administration of the Peoples' Republic of China;
- **Ms. Anne-Isabelle Degryse-Blateau**, Resident Representative of UNDP Korea Office; and
- **Dr. JE Jong-Geel**, Member of the National Assembly of Republic of Korea.



Figure 1. Keynote speakers at Project Official Launching Ceremony.

The Ceremony was broadcasted on Arirang TV News (The Korea International Broadcasting Foundation). Reporter, Ms. Kim Duyeon, interviewed the contributing players, two country government representatives, and resident representative of UNDP Korea Office. During the interview, both high-level government officials, and the UNDP Resident Representative in Korea emphasised the importance of the Yellow Sea marine environment for the participating countries, and key roles the project can play.

Mr. Kang Moo-Hyun: "The Yellow Sea is bordered by land on three sides, which has led to much contamination over the years due to rapid increases in population and economic development. That is why we need to protect this vital resource."

Mr. Sun Zhihui: "This project is important for both China and Korea because of our tradition of friendship, and because we are both faced with common problems and demands in the Yellow Sea area."

Ms. Anne-Isabelle Degryse-Blateau: "I think this is very significant to show the importance and the political implications of this project, and we do hope that this will become one of the tools for both countries' national strategies, to address this issue of the Yellow Sea."

2.2 Approval of the Implementation Plan

After the Official Launching Ceremony, the First Project Steering Committee (PSC) Meeting was held in Seoul, Korea. The PSC reviewed and approved the Project Implementation Plan which serves as a guide for the project's course. The Implementation Plan was developed by regional experts and the PMO staff over the course of two regional technical meetings held in Beijing, China, in December 2004, and in Ansan, Korea, in March 2005. The Plan includes the background, objectives, implementation mechanisms, list of agreed activities, budget, workplan, expected outputs, and monitoring and evaluation procedures.

One of the main activities at the beginning of the Project is to collect data and information to determine the transboundary problems in the Yellow Sea, the causes and impacts of the problems, and the governance issues related to the problems. This activity will illustrate the trends of each problem, the available data and information in the region, the gaps in knowledge, and what additional work is needed to provide a more complete picture of the status of the Yellow Sea. The results of the activity will provide a clearer picture on how the

remaining aspects of the Implementation Plan should be accomplished over the next four years, particularly the development of the Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP).

2.3 Regional and National Co-ordination

Since the first PSC meeting in March 2005, various institutional arrangements have been made in both China and Korea to facilitate the national co-ordinations for implementing the YSLME project. Additionally, the YSLME project has sought co-operation and co-ordination with relevant regional programmes. This section describes the latest developments in the regional and national co-ordinations among concerned countries and programmes.

2.3.1 Regional Co-ordination

The YSLME project has sought co-operation dynamically with relevant international organisations and NGOs such as the World Wide Fund for Nature (WWF). For example, to strengthen co-operation and share information, the YSLME project signed a Memorandum of Understanding (MOU) with the Yellow Sea Eco-Region Planning Programme (YSEPP) which was implemented jointly by WWF, Korea Environment Institute (KEI), and KORDI. The YSLME project also drafted the "Public Awareness and Communication Strategy" based on the co-operation with WWF Japan, WWF China, WWF Hong Kong, Wetlands International (WI), the Marine Stewardship Council (MSC), and the United Nations Environment Programme-Northwest Pacific Action Plan (NOWPAP). The YSLME project further pursues a co-operation with other regional programmes, such as IOC/WESTPAC and NEAR-GOOS, for mutual benefit and effective implementation of the project.

2.3.2 National co-ordinations

The Inter-ministerial Co-ordinating Committee (IMCC) and National Working Groups (NWGs) for the five project components (Biodiversity, Ecosystem, Fisheries, Investment, Pollution) were established in both China and Korea. A National Project Coordinator (NPC) for each country was designated by the respective National Focal Point.

In China, in addition to the above entities, a National Project Management Office was established in the Department of International Co-operation at the State Oceanic Administration (SAO) which is headed by the NPC. The Local Project Management Offices were also established.

In Korea, the NWG meetings have regularly been held to discuss, co-ordinate, and prepare for the Regional Working Group meetings and the Regional Scientific and Technical Panel (RSTP) meeting.

For better co-ordination and successful project implementation, as discussed in the Second Regional Working Group – Investment Meeting, the following activities are necessary:

- Inviting more institutions to participate in the activities of the national working groups, including local governments, local communities, and NGOs;
- Securing a relatively stable participation of the members to the respective meetings of the regional working groups; and
- Enhancing national co-ordination of relevant ministries in the implementation of the project.

2.4 Activities of the Regional Working Groups (RWGs)

For the effective planning and implementation of the project activities, ten meetings of the Regional Working Groups (RWG), two regional technical meetings and one special technical meeting for the co-operative study cruises were organised during the period of October 2004 – December 2005.

Discussions and agreements of these regional technical meetings provided solid bases for the implementation of the project, and outcomes and outputs of the meetings provided useful and effective mechanisms to implement the project activities as approved by the PSC.



Figure 2. 1st RWG-E Meeting, Goeje Island, Korea.

2.4.1 Fisheries Component

Over the past few months, members of the Fisheries Component have been engaged in activities to acquire data and information related to fisheries to provide a contemporary diagnosis for the status of fisheries, fisheries resources and mariculture of the Yellow Sea for input to the Fisheries section of the TDA.

The West Sea Fisheries Research Institute (WSFRI), of the National Fisheries Research and Development Institute, Korea, and the Yellow Sea Fisheries Institute (YSFRI), China, were contracted to undertake activities to collate existing data and information relating to perceived fisheries and mariculture issues, to support or refute the Yellow Sea's fisheries problems as identified by the members at the 1st RWG-F meeting.

The 2nd RWG-F meeting reviewed, and initiated the synthesis of the newly acquired data and information and identified the gaps, difficulties and barriers to data and information collection and began discussion on the preparation of data and information for input to the TDA, namely synthesising data and information to provide a region-wide diagnosis of the condition and trends in fisheries, fisheries resources and mariculture, describing the current status and patterns-of-change in benthic and pelagic resources, biodiversity, biomass, trophic structure, carrying capacity, abundance and distribution, and production levels of fisheries resources in

the Yellow Sea; and including a review of the national laws and regulations governing fisheries and mariculture.

The meeting also examined how the contemporary information related to the list of 'perceived problems', 'causal chain and governance' analysis agreed at the first RWG-F meeting are modified as a result.

Other important outcomes of the 2nd RWG-F Meeting were: an understanding of the Fisheries Component's role in the upcoming Co-operative Study Cruises of the Yellow Sea Marine Basin; activities to be implemented during 2005 to 2006, and the role of consultants and members of the RWG-F in the process.

Over the next two years, one of the responsibilities of the RWG-F is to provide technical guidance for the implementation of activities under this project component. Several activities falling under the four major activity categories for the Fisheries Component are: 1) Regional Stock Assessment; 2) Carrying Capacity; 3) Sustainable Mariculture; and 4) Laws, Regulations and Fisheries Management Plans. The products of these activities will contribute either to the TDA or to the development of SAP. The successful completion of the activities will ultimately produce:

- Regionally agreed methods for data and information collection and sharing in the Yellow Sea;
- An enhanced co-operative mechanism for regional data and information collection;
- Upgraded knowledge of the state of the Yellow Sea, in terms of its fisheries, fisheries resources and mariculture industry; and
- Increased mutual understanding and trust amongst the participating institutions.

2.4.2 Biodiversity Component

Over the past few months members of the Biodiversity Component have also been engaged in activities to acquire detailed biodiversity-related data and information to provide a contemporary diagnosis, or statement on the state-of-the-ecosystem of the Yellow Sea for input to the Biodiversity Chapter of the TDA. The National Fisheries Research and Development Institute (NFRDI), Korea, and the First Institute of Oceanography (FIO), China, were contracted to undertake acquisition activities for existing data and information relating to perceived biodiversity issues.

The objectives of these activities were to gather necessary data and information in the region to support or refute the Yellow Sea's biodiversity problems as identified by the Regional Working Group-Biodiversity (RWG-B) members in their first meeting, and for synthesis and analysis into a regional summary.

The task included the reviewing and collection of existing data and information that was agreed by the 1st RWG-B Meeting according to the temporal and spatial scales. The review attempts to cover the data and information existing in all institutions in both countries and also includes relevant data and information sources external to the region (e.g. the GIS database prepared by YSEPP). It is anticipated that this data and information will allow the Project to describe the changes in species composition, gene diversity, conservation areas, and habitat availability in the Yellow Sea over time, and identify gaps in data and information in order to show information should be collected for better management of biodiversity problems in future. It will also allow the Project to update the original causal chain analysis and initiate some areas of the governance analysis which were developed at the 1st RWG-B Meeting.

The expected outputs of these activities are:

- (i) A compilation of the best available data and information regarding the status and trends in biodiversity, in the format and scales agreed by the Regional Working Group for the Biodiversity component;
- (ii) A list of data and information sources to indicate the sources of the data and information collected in item (i), location of these data and information centres, conditions of access to data and information by different users;
- (iii) A report on the changes in species composition, gene diversity, conservation areas, and habitat availability; and
- (iv) A report on the biodiversity problems in the Yellow Sea coastal and marine areas of the country, including major problems, the priorities of the problems, preliminary causal chain and governance analysis.

The 2nd RWG-B Meeting reviewed, and began a synthesis of the biodiversity data and information for the Yellow Sea acquired through the recent data collection exercise to analyse the gaps, identify difficulties and barriers to data and information collection, and to discuss the preparation of data and information for input to the TDA. The major outcomes of the meeting were:

- An awareness of the quality, gaps, difficulties and barriers to collecting data and information on Biodiversity, and an understanding of mechanisms to address these issues.
- An awareness of the region-wide status and patterns-of-change in biodiversity, habitats and vulnerable species, and their protection in the Yellow Sea;
- A revised list of 'perceived problems' and Causal Chain Analysis agreed at the first RWG-Biodiversity (RWG-B) meeting.
- An improved state-of-knowledge of the existing national laws and regulations on biodiversity, habitat protection and vulnerable species and how these may contribute to potential governance issues.
- An agreement on Biodiversity Component inputs for the preparation of the Draft TDA.
- Understanding of the Biodiversity Component's role in the upcoming Cooperative Surveys of the Yellow Sea Marine Basin.
- Agreement on activities to be implemented during 2005 to 2006 including the objectives of the body-of-work that is required to be implemented prior to the next RWG-B meeting, the role of consultants and members of the RWG-B in the process.
- Agreement on list and schedule of activities for the RWG-B for 2005 to 2006.

One of the on-going responsibilities of the RWG-B over the next phase of the project is to provide technical guidance for implementation of activities under this project component. A number of activities have previously been identified for implementation during the first two years of the Project which requires the technical input of the RWG members or the involvement of consultant contracts. The results of these activities will contribute to the TDA, to the development of strategic action plans and prioritisation of project interventions, and will enhance capacity to manage biodiversity-related problems on a regional scale. Successful completion of the activities will ultimately produce:

- Regionally agreed methods for the observation, monitoring and sampling of biological and environmental parameters relating to biodiversity in the Yellow Sea;

- An enhanced co-operative mechanism for regional monitoring, observation and protection of biodiversity;
- Upgraded skills in the observation and monitoring of parameters for the protection and management of biodiversity; and
- And ultimately, a better scientific understanding of biodiversity in the Yellow Sea ecosystem.

2.4.3 Pollution Component

The Pollution Component embarked on its first activity to collect historical data and information to determine the pollution-related problems in the Yellow Sea. The types of data and information to collect were agreed upon at the First Regional Working Group – Pollution (RWG-P) Meeting. At this meeting, RWG-P members also carried out a preliminary causal chain and governance analysis based on what they perceived to be the transboundary pollution problems in the Yellow Sea. The members also revised the list of activities for the Pollution Component, which set the stage for the activities to be implemented over the coming years.

Contracts for the historical data collection activity were issued to the National Marine Environmental Monitoring Center (NMEMC), China, and KORDI to implement the activity. Some of the information collected-to-date was presented at the Second RWG-P Meeting.

During this meeting, members agreed on how to present their data in a standardised format for the regional synthesis and the TDA. Members will continue to collect additional data and information over the next 3 months, analyse the data, and present them in a final report. The data and information collected will be housed in the Project database at the China-Korea Joint Ocean Research Center.

An activity that will soon be completed is the preparation of regional pollution monitoring guidelines. The objective of the activity is to provide a regional plan for better monitoring and understanding of pollutants that affect the Yellow Sea. It is expected that the guidelines can be used for any future joint or separate monitoring activities in the Yellow Sea.

A consultant was hired to carry out the following tasks:

- 1) Provide a list of the vital chemical, physical and biological parameters to detect pollution problems in the Yellow Sea;
- 2) Prepare guidelines for sampling the parameters in different media (water, sediment, biota, etc.);
- 3) Propose numbers and siting of monitoring stations;
- 4) Suggest reporting procedures to national and international agencies;
- 5) List recommendations and justifications regarding acceptable contaminant levels; and
- 6) List recommendations for each parameter when a threshold level is exceeded.

The progress report was presented at the 2nd RWG-P Meeting, and participants gave suggestions to the consultant for preparation of the final report. It is anticipated that the guidelines will contain information on the above items, as well as:

- How to co-ordinate existing monitoring programmes into the regional guidelines, including how to use remote sensing as a monitoring tool;

- Linking the guidelines with existing monitoring programmes and geographic areas. Providing recommendations on how to link existing data systems and exchange of information gathered from future monitoring programmes; and
- Incorporating into the guidelines, existing inter-governmental agreements on data exchange.

The Pollution Component has also been examining the pollutant parameters that labs in the region should inter-calibrate. This exercise will assist with the analysis of samples collected from the co-operative study cruises, in that labs from China and Korea carrying out the analyses will produce comparable results.

In the first half of 2006, contracts will be issued to consultants and institutes to carry out more activities whose results will contribute to the writing of the TDA and SAP.

2.4.4 Ecosystem Component¹

The Ecosystem Component also embarked on its first activity to collect historical data and information to determine the ecosystem-related problems in the Yellow Sea. The types of data and information to collect were agreed upon at the First Regional Working Group-Ecosystem (RWG-E) Meeting. Like at the previous RWG meetings, RWG-E members also carried out a preliminary causal chain and governance analysis based on what they perceived to be the transboundary ecosystem problems in the Yellow Sea. The members also revised the list of activities for the Ecosystem Component, which guides the activities to be implemented over the coming years.

Contracts for the historical data collection activity were issued to FIO and WSFRI to implement the activity. Some of the data and information collected-to-date were presented at the Second RWG-E Meeting. Members agreed on the format to present the data for regional synthesis and the TDA.

The Ecosystem Component has finalised its team members, equipment, and budget for the winter co-operative study cruise where plankton samples will be collected and analysed to complement the historical data collection activity.

Early in 2006, contracts will be issued to consultants and institutes to carry out additional activities whose results will contribute to the writing of the TDA and SAP. Some of these activities include: regional synthesis of national data, assessing carrying capacity, identifying stresses to the ecosystem, and workshops on monitoring the ecosystem.

2.4.5 Investment Component

The major activities of the Regional Working Group – Investment (RWG-I) consist of: (i) stakeholders, (ii) regional coordination, (iii) national institutions, (iv) financial instruments, (v) data and information management, and (vi) public awareness and participation.

Stakeholders

This activity, closely linked with public awareness and participation, identifies the stakeholders and strengthens their capacity of environmental management and decision-

¹ This report was prepared prior to the 2nd RWG-E Meeting. The results of the 2nd RWG-E Meeting can be found in the RWG-E Chairperson's report (Document UNDP/GEF/YS/RSP.2/7) and 2nd RWG-E Meeting Report (Document UNDP/GEF/YS/RWG-E.2/3).

making. The RWG-I explored the Governance Analysis as a tool for identifying all relevant stakeholders in the Yellow Sea as well as for contributing to the TDA development. As a result, the execution plan for the Governance Analysis was devised. This draft plan will be submitted to the PSC meeting for approval.

Regional co-ordination

The activity of regional co-ordination proceeds with the preparation of the TDA and SAP. To incorporate the socioeconomic aspects of the Yellow Sea ecosystem into the SAP, the Investment Component considered the implementation of Environmental Valuation. The Component examined the guideline for valuation studies, which was drafted by the PMO. The Investment group also discussed the execution plan for the Environmental Valuation; the plan will be submitted to and assessed by the RSTP/PSC.

National institutions

The third activity of the Investment Component includes establishing National Co-ordination Units to secure intersectoral co-ordination in the TDA/SAP process. For the national co-ordination as well as the regional co-ordination activities, consult section 2.3, "Regional and National Co-ordinations," in this report.

Financial instruments

This activity contributes to the financial sustainability of the environmental conservation activities for the YSLME after the project is completed. The RWG-I explored a number of activities to secure the sustainability, including the training programmes for environmental project identification and preparation. The members also considered the regional strategy for financial sustainability; as a result, the implementation structure for developing the strategy was determined. The PMO will prepare a draft strategy for further consideration.

Data and information management

The data and information management (DIM) includes the development and implementation of the regional DIM strategy. The China-Korea Joint Ocean Research Center will host the meta database and the GIS database of the YSLME project, and establish and maintain these databases. The RWG-I assessed both the technical considerations and the specific activities / schedules for the database development.

Public awareness and participation

The final activity of the RWG-I includes encouraging public participation to induce broad support and expertise to conserve the Yellow Sea ecosystem. The Investment Component examined the "Public Awareness and Communication Strategy" which was jointly drafted with members of the Yellow Sea Partnership. The RWG-I also discussed and agreed on holding the Partnership Workshop for better co-operation and co-ordination. For further information on the strategy and partnership, consult section 3, "Public Awareness and Participation," in this report.

During the two RWG-I Meetings, the above activities were extensively discussed. Based on the agreement of these meetings, the contracts will be issued to consultants to implement the Governance Analysis, the Environmental Valuation, and the Data and Information Management.

2.5 Planning for the Co-operative Study Cruises

Based on the discussion and agreements during the preparation phase of the project, regional cooperative study activities for the Yellow Sea marine basin were included in the Project Document. These were to the form of two cooperative or 'joint' cruises of the Yellow Sea marine basin. The objectives of the study cruises are to:

1. Provide basin-wide data and information for the Yellow Sea covering all components identified in the Implementation Plan of the project, and based on the data and information gaps identified by the Regional Working Groups;
2. Provide data and information that will be used, together with other existing data and information, in the preparation of the TDA, in particular the data and information covering the entire Yellow Sea; and
3. Prepare necessary baselines of the status of the Yellow Sea environment at start of project implementation, when combined with all other data and information available to the project. The baseline information will be used in the later stage as one of the indicators for the evaluation of the project.

During the 1st PSC Meeting, the original number of cruises planned in the Project Document was reduced from 6 to 2, due to changes in the financial environment within, and external to the Project over the past 5 years. Following the decisions of the PSC, the RWGs and the RSTP further discussed the details of co-operative monitoring cruises, and two cruises, a 'winter' and a 'spring' cruise, were subsequently planned to be undertaken in the Yellow Sea marine basin,

The survey plan and workplan for the cruise were further discussed and finalised at a separate "Technical Meeting for the Cooperative Study Cruise." During this meeting the expected outcomes and outputs of the cruise were detailed, technical issues were addressed and logistical arrangements planned.

Outcomes and Outputs from the Survey

The overall outcomes and outputs of the cooperative survey were finalised at the Technical Meeting, and include:

- the better understanding of the status and conditions of the Yellow Sea Marine basin ecosystem; and
- the condition and quality of the Yellow Sea marine basin habitat and the biological and physical dynamics of the Yellow Sea marine basin system.

More specifically, the data/information collected from both surveys will allow the project to determine status and changes in benthic and pelagic resources, quality and availability of bottom and pelagic habitats, abundance and distribution of organisms in the Yellow Sea marine basin, status of marine pollution and water quality in the Yellow Sea marine basin; and provide us with basic basin-wide information on the marine environment of the Yellow Sea. The resultant data/information will allow the Project to identify trends, and/or predict changes under prevailing ecosystem conditions and identify or prioritise interventions for the SAP phase of the project. The ultimate outcomes of the cooperative cruise include:

- regionally agreed methods for the observation, monitoring and sampling of marine environmental parameters in the Yellow Sea;

- an enhanced co-operative mechanism for regional marine environment monitoring and observation;
- upgraded skills in basin-wide observation and monitoring;
- a better scientific understanding of the basin-wide marine environment/ecosystem status;
- identification of data/information and knowledge gaps; and
- an increased mutual understanding and trust amongst the participating institutions.

The expected outputs of the winter survey include the resultant data and reports from the survey activities, recommendations and items to be addressed for the next survey in spring, and a preliminary analysis of collected data.

Finalisation of Survey Plan

Cruise Dates

The first cruise will take place from the 4th to 25th January, 2006 (As per the agreement of the 1st RSTP Meeting), with participation of experts from both the People's Republic of China and the Republic of Korea. This cruise is known as the 'winter' survey.

The second 'spring' cruise is planned for May 2006, although the exact start dates and duration times are yet to be determined.

Observation Stations, Transects and Ships Route

The initial survey plan for the winter survey, proposed at the first RSTP meeting, was re-modified during the Technical Meeting for the Co-operative Study Cruises.

The initial plan included 52 discrete sampling stations for bottom trawl, phytoplankton & zooplankton sampling, and 27 environmental stations (for CTD deployment) and 15 stations for pelagic trawl (based on acoustic echogram). The survey will start from the southern sampling area and proceed northwards, and it was agreed that station points could be adjusted according to weather and sea conditions. Sampling stations were arranged in such a way as to respect the territorial waters of each country.

During the Technical Meeting for the Co-operative Study Cruises, a new survey plan for winter and summer was developed, based largely upon a proposal by the Korean members using a modified version of the initial plan. (See Document UNDP/GEF/YS/RSP.2/8 for the survey routes).

There are 50 stations in the new plan for the winter survey and up to 71 stations planned for the spring survey cruise, with the position of transect lanes changing slightly. The winter survey continues to concentrate on the sampling of the Yellow Sea cold water mass, and both surveys continue to respect the territorial waters of each country.

Logistical Arrangements

Government Approval

In accordance with the relevant regulations of the People's Republic of China, approval of the co-operative study cruise is required 6 months before the initiation of the activity. According to the NPC for China, the approval process has been initiated with the relevant ministries. In lieu of this, it was agreed that the spring cruise would be considered concurrently with the winter cruise, with government approvals for both sought

simultaneously. Korea has a similar approval policy and the urgency to finalise the cruise plan expeditiously and without major modification was highlighted to all relevant persons.

Workplan and Schedule

The Technical Meeting in finalised a schedule and workplan for the winter study cruise. The plan comprises of activities and responsibilities leading up to, during, and after the cruise, for each participating component. An equipment and personnel manifest was also finalised, identifying the equipment lacking/needing to be acquired and the personnel responsible for its purchase and/or handling and operation during the cruise.

Post-Cruise Sample & Data Handling

The difficulties associated with division and handling of samples for analysis at the conclusion of the study surveys was discussed at the Technical Meeting. Members agreed to develop detailed lists of sample types required to be relocated to Korea from Qingdao at the end of the study cruises and provide them to the PMO in order to seek the appropriate government approvals.

It was agreed that the newly acquired survey cruise data would become the property of the GEF with the principle and understanding that data will be shared equally between the participating countries. However, in order to implement this principle, and in particular to allow the relocation of the samples to Korea, there was a need to obtain approval from the respective governmental agencies, which shall be on a case-by-case basis.

The PMO has prepared a policy paper on the handling and sharing of data (as requested by the RSTP at its first meeting), to be presented to the next Project Steering Committee for consideration and approval (refer Document UNDP/GEF/YS/RSP.2/11).

Considerations for the Spring Survey

It was requested that an extra Technical Meeting for the Co-operative Survey Cruises be held at the completion of the first cruise and before the initiation of the next cruise to facilitate the organisation and quality of output of the second co-operative study cruise. The months of March to April were agreed as a suitable time for such a meeting.

2.6 Involvement of DPR Korea in the project

As instructed by the Project Steering Committee at its first meeting in Seoul, Korea, March 2005, the Project Manager visited the Democratic People's Republic of Korea (DPRK), 12-16 July 2005, together with a representative (Mr. Wenxi Zhu) from one of the project's participating countries.

The purposes of the visit were:

- (i) Introducing the UNDP/GEF Yellow Sea Project to the relevant organisation(s) in DPR Korea;
- (ii) Exploring possibility to get DPR Korea involved in the Project; and
- (iii) Establishing communication mechanisms with DPR Korea, if they are interested in participating in the project activities.

The visit was approved by the National Co-ordinating Committee for Environment in DPR Korea, and the discussion was organised with the State Hydrometeorological Administration (SHMA), DPR Korea, which is a governmental organisation responsible for hydrology

(including underground water), meteorology, and marine environment (including oceanography).

Following the presentation of the project activities by the Project Manager, the discussions were focused on the issues of the interests and possibilities of the DPR Korea to participate in the project. Following the extensive discussions on several policy and practical issues, and exchange views, SHMA expressed its interests in participating in the project activities. The final decision should be made by the National Co-ordinating Committee for the Environment in DPR Korea.

The major outcomes of the visit were:

- (i) It was confirmed and agreed that the exchange of data and information is required for the project to understand better the marine environment status and trends, but it would not be the pre-condition for DPR Korea's participation in the project;
- (ii) Co-operative cruises organised by the project will exclude the territorial sea areas of the participating countries. This is not only for the DPR Korea, but for all the participating countries as agreed in the Project Document, and by the Project Steering Committee; and
- (iii) The representatives of DPR Korea should be invited to participate in the second meetings of the RSTP and PSC, as full members if the approval for project participation was obtained, or as observers if the approval was not yet obtained.

During the visit, the Project Manager visited the UNDP Pyongyang Office and had a meeting with staff of the office. Information about the project was provided, and brief discussion about the involvement of the DPRK took place.

2.7 Cross component issues

The interdisciplinary nature of the Yellow Sea Project and wide-encompassing ecological characteristics of any large marine ecosystem such as the Yellow Sea ecosystem, have led to the development of an environmental management project that will address the most critical aspects of the ecosystem, as identified by regional experts. However, as the ecosystem does not function in discrete packets, many of the issues that the Project will address, do overlap with each other. Some examples of cross-component issues include, *inter alia*:

- redundancy in identified transboundary problems related to each component;
- redundancy in data and information to be collected to address the perceived problems;
- governance analysis to be done by each component or one for all components;
- storage, maintenance, and accessibility of data and information collected under each project component; and
- assessing carrying capacity of the ecosystem.

Some of the activities of the Project's five main focal areas – Fisheries, Biodiversity, Ecosystem, Pollution and Investment – are cross-component in nature, and were addressed and discussed during the 1st RSTP Meeting with the following conclusions:

- The Fisheries Component generally focuses its carrying capacity assessment on higher trophic levels, while the Ecosystem Component prefers to focus on lower

trophic levels. A special working group at the 1st RSTP Meeting agreed that carrying capacity assessment will focus on fisheries resources, namely the highest possible fish biomass in the Yellow Sea from surveys, with the output from Ecosystem Component's primary and secondary production assessment serving as input for the estimation of carrying capacity in the Fisheries Component. The group reported that it would pursue the goal in two ways: 1) population dynamics approach; and 2) lower trophic productivity-higher trophic level model (possibly ECOPATH) approach.

- The 1st RSTP Meeting agreed that social economic and governance analysis would be carried out separately by each component, and the integrated analysis would be carried out after receiving the results from the Regional Working Groups. Guidelines for implementing socio-economic analysis and economic valuation of natural resources would be prepared by the Project Management Office (PMO), with guidance from the Regional Working Group for Investment.
- For data management, the 1st RSTP Meeting agreed that:
 1. The meta database and GIS database will be hosted in the China-Korea Joint Ocean Research Center.
 2. The PMO will take a leading role in the development of the databases, with input from database development experts.
 3. The members of the regional working groups should be involved in the development of the databases.
 4. The host will be responsible for the daily maintenance of the databases. China and Korea will have equal responsibility for the joint facility, and management of the data in the future.

As it was particularly difficult to obtain an overall picture of the data and information that overlap, the 1st RSTP Meeting requested the PMO to produce three matrices to show the areas of overlap more clearly:

1. perceived transboundary problems;
2. historical data review; and
3. co-operative study cruises data collection.

The three matrices are shown in [Annex II](#).

The Second RSTP Meeting will review the tables, improve them, discuss how to share the data amongst the various components, and agree on the responsible group(s) to collect any remaining overlapping data.

3. Public Awareness and Participation

A "Public Awareness and Communications Strategy" was devised by the PMO in conjunction with other collaborating bodies, to produce a comprehensive and straightforward framework for coordinated actions of the numerous groups involved in the Yellow Sea Partnership. The partnership is open and available for participation by any organisation interested in the activities identified in this strategy.

The Strategy is a 'work in progress,' the contents of which will be built-upon over time, particularly as more stakeholders are identified, partnerships made, and lessons learned. It will be executed and evolved on a continual basis.

Purposes of the Public Awareness and Communication Strategy

The purpose of this strategy is to create a strong awareness of the problems faced by the Yellow Sea by informing the wider stakeholder-ship of the impacts of unsustainable activities, and how the Yellow Sea ecosystem can be improved by the mitigation or elimination of the impacts, or stressors, for the benefit of humankind; namely, the strategy aims to:

- Establish a partnership for joint activities in the public awareness and participation in the Yellow Sea;
- Produce a regional list of the stakeholders using the Yellow Sea coastal and marine resources as a major targeted group;
- Inform stakeholders of the roles of the Yellow Sea in the global scenario;
- Report to stakeholders of the perceived problems faced by the Yellow Sea;
- Warn how these problems can and do affect local and global communities;
- Inform how remediation of perceived problems can benefit all stakeholders;
- Inform stakeholders of the current efforts of various projects, the focus and rationale of each;
- Inform of the outcomes and benefits of the various projects to both the stakeholders and the coastal and marine environment;
- Inform stakeholders and funding agencies of the status of the projects and incremental levels of achievements;
- Inform stakeholders of their roles and responsibilities in stewardship of the ecosystem;
- Inform all stakeholders, including governmental, intergovernmental and non-governmental bodies, of their functions in improving the status of the environment in the Yellow Sea; and
- Encourage greater stakeholder contributions to environmental management and the decision-making process.

Overall messages delivered by the Strategy

The overall messages that this Public Awareness and Communications Strategy strives to convey are:

- The status of the Yellow Sea – the problems and the trends;
- How environmental problems affect local communities, adjacent countries, the global community and global environmental systems;
- What is currently being done to monitor and remediate these problems;
- How remediation of environmental problems can benefit stakeholders; and
- The role that each partner plays in the Yellow Sea partnership.

These are broken down into more specific messages in separate sub-strategies which target specific stakeholder groups to maximise information transfer (see Document UNDP/GEF/YS/RSP.2/5).

Expected Outcomes of the Strategy

The expected outcomes of this strategy are to create a strong public awareness of the problems faced by the Yellow Sea, how the ecosystem is currently affected by the activities of humans and how the ecosystem can be improved by the mitigation or elimination of these problems. As a result, develop strong public support and participation in actions leading to the mitigation or elimination of these problems, as a major element in the management plan of the Yellow Sea.

Initial Implementing Entities of the Strategy

- YSEPP
- WWF Hong Kong
- WWF China
- Wetlands International
- Marine Stewardship Council
- YSLME

Target Audiences of the Strategy

- Community-based Organisations
- Scientific Community
- National and Local Government Agencies
- Legislative Bodies
- Non-government Organisations including Religious Groups
- General Public/Media
- Donor Community
- Industry/Consumers
- Youth Groups

Schedule for Implementing the Strategy

Implementation of the Public Awareness and Communication Strategy consists of four phases along with the major developments of the Project: (i) preparation, (ii) TDA, (iii) SAP, and (iv) demonstration/pilot activities. The relevant information on implementation is available in Document UNDP/GEF/YS/RSP.2/5.

Public awareness materials

In line with the Public Awareness and Communications Strategy, the PMO has embarked on an exercise to develop its own range of promotional items. Based on a master list of items developed in the strategy, the PMO has selected a small number of items to be produced by the end of 2005.



Figure 3. Left: Project poster. Right: Project brochure.

All items will sport the YSLME Project's dynamic logo and website URL address. Items to be developed in the short-term include hats/caps, business card holders, ornamental magnets, computer mouse pads, writing pens, posters and brochures. At present, the Project brochure and posters have been completed, with the designs for the caps, business card holders, pens and mouse pads being finalised.

4. Financial Report

A brief overview of the financial aspects of the Project is reported here to provide Project partners with a general understanding of the basic fiscal aspects of implementing the Project.

4.1 Financial rules applied to the project

Period for project budget

To provide for continuity in the programming and implementation of UN assistance to projects, the financial period for the purpose of the proposed utilization of resources entrusted to the charge of UNOPS and of entering into obligations in such respect shall be the duration of each project as defined in the project document.

The financial period for the purpose of incurring and accounting for expenditures in respect of projects shall consist of a single calendar year.

Format of the Project Budget

In the approved Implementation Plan of the project, the project budget was presented using the format known as “IMIS codes.” An example is shown below in Table 2.

Table 2. Example of Project Budget shown by IMIS codes.

Budget	Description	Year 1		Year 2		Year 3		Year 4		Year 5		Total	
		m/m	\$	m/m	\$								
10.00	Personnel												
11.00	International Experts												
11.01	CTA	1/12	171,919	1/12	180,515	1/12	189,541	1/12	191,364	1/12	200,932	1/60	934,271
11.02	Economist	1/12	109,200	1/12	114,660	1/12	120,393	-	-	-	-	1/36	344,253
11.03	Scientific Officer	1/12	109,200	1/12	114,660	1/12	120,393	-	-	-	-	1/36	344,253
11.04	Public Advisor	1/12	80,000	1/12	84,000	1/12	88,200	-	-	-	-	1/36	252,200
	Short-term Consultants												
11.51	Carrying Capacity Consultant (IB)	1/1	17,900	1/1	17,900	-	-	-	-	-	-	1/2	35,800

Currently, the financial management system in UNDP and UNOPS has changed to the Atlas format. In order to:

- (i) follow the changes in the financial management system in UNDP and UNOPS; and
- (ii) provide easy understanding of project planning and implementation.

The new budget format is prepared based on the Atlas format, which is a clearer way to show the activities and budget of each project component. Refer to Document UNDP/GEF/YS/RSP.2/13 for the new budget format.

Revision of project budgets

(a) Whenever a project budget ceases to reflect actual circumstances or current expectations in any significant respect, it shall be revised accordingly.

(b) Revisions primarily made to reflect expenditures of the previous year and other appropriate changes shall be prepared annually for each project budget. Such mandatory revisions shall be submitted by the executing agency, immediately following its issuance of year-end delivery reports.

There have been some unspent money and changes in priority of activities, thus, a budget revision has been prepared by the PMO, and presented to the RSTP Meeting for review.

ADMINISTRATION OF RESOURCES

Procurement

The basic principles are transparency and fairness, economy and best value. The following general principles shall be given due consideration in carrying out the procurement functions of UNDP under these Rules:

- (a) Economy and efficiency;
- (b) The interests of the UNDP programme;
- (c) International soliciting of proposals and competitive bidding to allow prospective proposers and bidders fair and equal opportunities to provide those goods, services and other requirements being sought by UNDP;
- (d) The utilisation of currencies available to UNDP and which require special management;
- (e) Preferential treatment to be accorded to sources of those supplies indigenous either to the country being assisted or to other developing countries; and
- (f) Equitable geographical distribution consistent with maximum effectiveness.

Advance and progress payments: When the advance payment for USD 50,000 or more is required and subsequently approved, UNOPS will normally require a bank guarantee or other suitable security arrangement.

Security: All contracted personnel have to pass the “Basic Security in the Field – Staff Safety, Health and Welfare” test.

4.2 Expenditures and balance of the project

[Annex III](#) shows the expenditures and balance for the project, as of 25th November 2005. The expenditures for January to October 2005 reflect real expenditures, while expenditures for November to December 2005 are estimated, as the detailed expenditure information was not received from UNOPS.

It should be noted that the five-year project period will be from 1st January 2005 - 31 December 2009. There was no budget in 2004 although the Project Manager reported to duty on 15th September 2004.

It should also be noted that the supporting staffs' salaries were affected by the exchange rate between Korean Won and US Dollar because their contracts are based on Korean Won, but should be reflected in the budget as US Dollar. International staffs' post adjustment was changed from 77.2% to 49.2% of net salary starting in November 2005, which is reflected in the budget total for 2005.

Finally, the reasons for the relatively large un-spent balance in 2005 are: 1) This year was the project inception year (1st year of the project); there have been a lot of preparation work; and 2) Slow response from some RWGs and contractors.

5. Report on the Project Management Office

5.1 Office & Facilities

Since the UNDP/GEF Yellow Sea Project was approved and established in the KORDI compound, KORDI has generously provided a wide range of support to the Project and the PMO. The MOU between PMO and KORDI was signed on 10th December 2004 to agree on the necessary logistic support and services KORDI would provide. In July 2005, KORDI provided the PMO with office space in the No. 1 Research Building for the PMO staff with additional space for interns, office furniture, computers, printers and standard office equipment. The PMO is now fully operational. On behalf of the Project, the PMO expresses

its sincere gratitude to KORDI for her gracious support and assistance that continue to ensure that project implementation proceeds smoothly.

5.2 Staff Recruitment and Intern Programme

One of the most important tasks during the first year of the project implementation was to recruit the necessary project staff and form a management team for effective implementation of the project activities.

With support of the UNDP/GEF, UNDP Korea Office and UNOPS, the recruitment process was carried out transparently and effectively. A total nine staff, from five different countries, were recruited and form a project team for the implementation of the project activities. It should be noted that the speedy recruitment of the project staff has provided the basic mechanism for the effective implementation of the project activities approved by the Project Steering Committee.

It is a pleasure of the Project Manager to report to the Project Steering Committee and participating countries that the project staff recruited has shown effective operational skills and initiatives to accomplish their work, are hard working, have a high level of ability to complete the tasks at hand, and strong team-work spirit.

5.3 Information Dissemination

The Project's homepage (<http://www.yslme.org>) provides background information about the project, the staff and partners, the latest news on implementation, project reports and meeting documents, and relevant stories about the Yellow Sea. The first page is designed to show the site's categories and contents for easy understanding and access. The visual design of the front page is changed at regular 6-month intervals.

To accomplish the information delivery mission, the homepage has a link to an E-Discussion forum (<http://www.yslme.org/forum/>). The PMO will initiate discussion topics and continuously update the forum. Anyone can join and post messages.

One of the success indicators for this project will be regional communication and mutual understanding. The E-Discussion forum can be a solution for communication. Even though the usage rate is currently low, if the forum becomes more active, it can be a good indicator of the project's regional communication and co-ordination objective.

The E-Newsletter is issued at regular 3-month intervals. The newsletter includes PMO inside news, various meeting's news, and Yellow Sea news. The newsletter is sent by e-mail to project partners, and can also be accessed from the website. Anyone may contribute news to the newsletter, by e-mailing his article to info@yslme.org.

Finally, the PMO is planning to establish a GIS webpage for the general public to understand the Yellow Sea environment.

The PMO continues to seek better ways to communicate with the public and transmit information. Suggestions in this regard are welcome.

5.4 Operation of the Office

Operation on project implementation

As this is first year of project implementation, the operation of this function has special characteristics: new project, new project office, new staff, and new project management structure.

As a new project, it is essential to establish the project operation system within the UNOPS framework. With assistance of UNOPS staff, the operation system has been established in the Project Management Office according to the rules and regulations of UNOPS. The following operational structure was set up:

- (i) The Project Manager has been authorised by the Executive Director of UNOPS on the operation of imprest account and management of the project activities;
- (ii) Imprest account, in both US dollar and Korean won, has been set up with assistance of UNOPS technical staff, and necessary training was carried out in the PMO for operating the accounts;
- (iii) A training workshop was organised by UNOPS for the project operation and management in Geneva, September 2005. Three project staff participated in the training workshop, and shared experiences and lessons with the staff from other projects. The newly acquired knowledge was transferred to the rest of the PMO staff; and
- (iv) Daily management of the project activities has been operated by the PMO with a total of 14 contracts negotiated and concluded. There have been a total of 15 meetings organised by the PMO, including PSC, RSTP, RWGs and technical meetings.

From the operation of the first year of the project implementation, the Project Manager is confident that with the assistance of UNOPS and UNDP country offices, and with the co-operation of the participating countries, the operation of the PMO will improve, and become more smooth and effective in the years to come.

6. Co-operation with other Organisations and Projects

To enhance the effectiveness of its conservation and communications activities, the Project YSLME has pursued co-operation with a number of relevant international organisations and NGOs.

During the First RSTP Meeting, members of the RSTP and representatives from potential “partners” explored the possibility and mechanisms for successful co-operation. Considerable mutual benefit was realised and this formed the impetus for partnerships among a number of interested parties. As a result, an MOU was signed between YSLME and YSEPP, laying the foundation stone for the “Yellow Sea Partnership” (see Section 3). Since then, co-operation with other organisations has been pursued leading to the development of MOUs with at least three other major partners including WI, MSC and NOWPAP. All of these MOUs are currently at the signature stage.

All parties share the common objective of conserving and using the coastal and marine resources of the Yellow Sea in a sustainable manner and will mutually benefit from this cooperation through maximising the use of human and financial resources and avoiding overlaps and duplication of work.

The purpose of the MOUs is to set out principles and the practical basis to cooperate in promoting conservation and sustainable use of marine and coastal resources of the Yellow Sea. The MOUs describe agreements for the exchanging of data and information, and discussion of potential areas and mechanisms for co-operation and co-financing in promoting protection of the marine and coastal environment, and sustainable use of marine and coastal resources in the Yellow Sea. They also provide a framework for cooperation and facilitate the collaboration between the parties in areas related to global environmental issues of concern to each party, including promoting the “identification, formulation, implementation, and monitoring and evaluation on issues of mutual interest.” It is noted that the activities and potential areas for collaboration identified under the MOUs represent significant contributions towards meeting national commitments under such international agreements such as the Convention on Biological Diversity, Ramsar Convention on Wetlands and FAO Code of Conduct for Sustainable Fisheries in the Yellow Sea areas. In particular, the proposed activities will help answer the urgent need to address the under-representation of protection of the marine and coastal ecosystem and will contribute to building national frameworks of marine and coastal protection.

Currently, the PMO is developing a comprehensive workplan that integrates the considerations and input (physical and financial) of all partners, detailing the agreed activities, the schedule for each item and their cost requirements. A ‘Yellow Sea Partnership’ workshop is planned to be held in late February to formally initiate the activities that will take place over the next 4 years.

7. Challenges to implementation of project activities

National co-ordination needs to be further strengthened

From the experiences of the implementation of the project activities during the first year, it was apparent that effective co-ordination and co-operation at national level will not only provide necessary support to the implementation of the project activities as agreed by the PSC, but also ensure the quality of project outcomes. In order to ensure successful preparation, and more importantly, approval of the TDA and SAP, the national co-ordination and co-operation should be further ensured.

(i) Enhancing the roles of the IMCC

During the first year, the Inter-Ministry Co-ordinating Committees were established in the participating countries. However, due to various reasons and constraints, the meeting of IMCC has not been organised, although communications between the relevant ministries were well established.

(ii) Enlarging participation in the national working groups, including NGOs

The national working groups for the project components have been well established in the participating countries, and are playing key roles in project implementation. Considering the tasks faced by the project, it would be more effective and beneficial to all participating countries if more institutions, including NGOs, could be involved in the project. It should be noted that by enlarging participation of more institutions, it would not only bring more expertise and human resources to the project, but also bring more attention to the environmental problems faced by the Yellow Sea.

(iii) Involvement of local governments and communities in project activities

The involvement of local governments and communities has been well recognised by the project during the PDF-B phase, and relevant activities were planned in the project document. It should be noted that in order to obtain support from the local governments and local communities in preparation, approval and implementation of the Strategic Action Programme, and the National Strategic Action Plan, it would be more beneficial if the local government and local communities could be involved in the project activities, the earlier the better.

Better understanding of the UN and GEF financial rules and operational mechanisms will assist with implementation

During the first year of implementing project activities, UN and GEF financial rules and operational mechanisms have been understood better by the experts and relevant institutions that are participating in the project. Some difficulties have been solved with assistance from, and support of, the participating governments. Due to the complexities of the project activities, better understanding of the rules and mechanisms is necessary and beneficial to the project's success. For instance, in the case of participation of experts to the project meetings, the project will only cover the travel costs at the most economic prices, and would cover full or partial DSA according to UN rate. It is not possible for the project to provide "consultancy fees" for the experts who participate in the meetings.

Prompt actions to adhere to the overall workplan for the implementation of the project

Due to the efforts of all institutions and experts involved in the project, the implementation of the project activities have been successful in keeping to the overall schedule and workplan of the project. As this is the first year of the project, some delays have happened during the implementation of the project activities in the first year.

- *Contracts*

Some contracts were delayed due to lack of understanding of the procedure, and the calculation of the project costs. Although some institutions and experts started the work before the contracts were formally established, it is worthwhile to note the technical requirements and procedures to establish contracts between the institutions/experts and PMO/UNOPS. PMO has used all the possible occasions to introduce the relevant procedures.

- *Meetings*

During the first year, there were a number of meetings that were organised. It has been a challenge to all the project partners that the agreed meeting dates changed too often with various reasons. With understanding of the busy schedule for the experts involved in the project, it is critical to keep to the agreed meeting dates as much as possible to avoid unnecessary further conflicts in meeting dates. It has been a great difficulty to arrange the second round meetings of the RWGs, as four of five meetings changed the originally agreed dates.

Communication between the national experts and PMO needs to be strengthened

Communication between the experts involved in the project and the PMO were satisfactory in most cases. However, for some individuals, the communication should be strengthened, also between "national project leaders" and their national team members. From the project management point of view, we are expecting the responses from:

- Confirmation of participating in meetings (in case the decision can not be made immediately, an acknowledgement of receipt of invitation, and possible date to confirm the participation is needed);
- Responses according to various deadlines for implementing activities (in case the deadlines cannot be kept, a notification would help with understanding the delay, and new arrangements can be made);
- Responses on reminders; and
- Other communications require response to exchange views, and necessary actions.

Additionally, the “national project leaders” should transfer all information gleaned from RWG, technical, RSTP, and PSC meetings to their national colleagues. This would ensure that all parties are kept up-to-date with the implementation progress, and may discuss the issues when required, without having to be informed about the developments.

Logistic arrangement will assist smooth implementation of the project activities

There were also some logistic challenges that affected the implementation of the project. If solutions could be obtained, it would assist future implementation of the project.

(i) Stable membership

During the first year, the members in some Regional Working Groups changed too often. Consistent membership leads to better understanding of the project for the individual, and also for the whole component. In this regard, stable membership would largely help the implementation of project;

(ii) Re-entry visa

Applications of necessary entry visa for both countries required a lot of effort of all the persons concerned, including the experts attending the meetings, the PMO staff, and National Focal Points. For instance, some of the PMO staff has undertaken 4 or 5 international trips this year to the same country, and each time, has had to apply for an entry visa.

It would be much more helpful if the NPCs could consult with relevant national authorities to issue re-entry visas to the project staff and experts concerned.

Recommendations for future implementation

Following a lengthy preparation phase, the UNDP/GEF Yellow Sea project has finally reached its implementation phase, with a successful inception period. Thanks to the efforts made by all the partners of the project, the first year’s implementation has been completed according to the workplan approved by the first meeting of the Project Steering Committee.

Based on the experiences and lessons learnt during the first year’s implementation, the Project Manager and his staff in the Project Management Office would like to make the following recommendations to the PSC for better and more effective implementation of the remainder of the project.

Recommendation 1. The momentum generated within the framework of the project should be maintained and increased.

The participating countries have fully realised the importance of protecting the marine environment and sustainable use of marine and coastal resources in the Yellow Sea, which has been listed as priorities on the national agendas of sustainable development. Through the co-operations under this project and other activities, the governments of the participating countries recognise that the tasks in protecting Yellow Sea marine environment and rational use of coastal and marine resources can only be fulfilled through co-operation with all the coastal countries involved. The support from GEF and UNDP has generated strong momentum in the region. In order to keep the political and scientific momentum, and enhance more effective co-operation, the following actions are very important for the future implementation of the project activities:

- Generating more political support by IMCC within the participating countries;
- Continuing to build up stronger and more stable national teams in implementing the approved project activities; and
- Enhancing more effective regional co-operating mechanism, not only within the project framework, but through the “Yellow Sea Partnership” developed by the project.

Recommendation 2. Mutual understanding and mutual trust among the participating countries should be built up based on better understanding through improved co-operation.

Based on the experiences of various activities in the Yellow Sea, the participating countries realised that effective co-operation in solving marine environmental problems in the Yellow Sea rely on mutual understanding and mutual trust. Currently, the general co-operation atmosphere has been developed by all the partners involved in the Yellow Sea region. In the meantime, it is the willingness of all the partners that the mutual understanding and trusts are still critical for the success of the project. In particular, the following recommendations are essential:

- More open policy on marine environment data and information sharing and exchange; and
- More joint activities should be organised along the line of the co-operative study cruises planned under the project.

Recommendation 3. Enhanced national co-ordination will ensure the success and sustainability of the project.

One of the objectives of the project is to enhance national co-ordination in protecting the Yellow Sea. Effective co-ordination will not only ensure smooth implementation of the project, and ensure the successful preparation and approval of the regional Strategic Action Programme, but will also contribute to the sustainability of the project’s benefits to the region. To achieve this goal, the following activities are recommended:

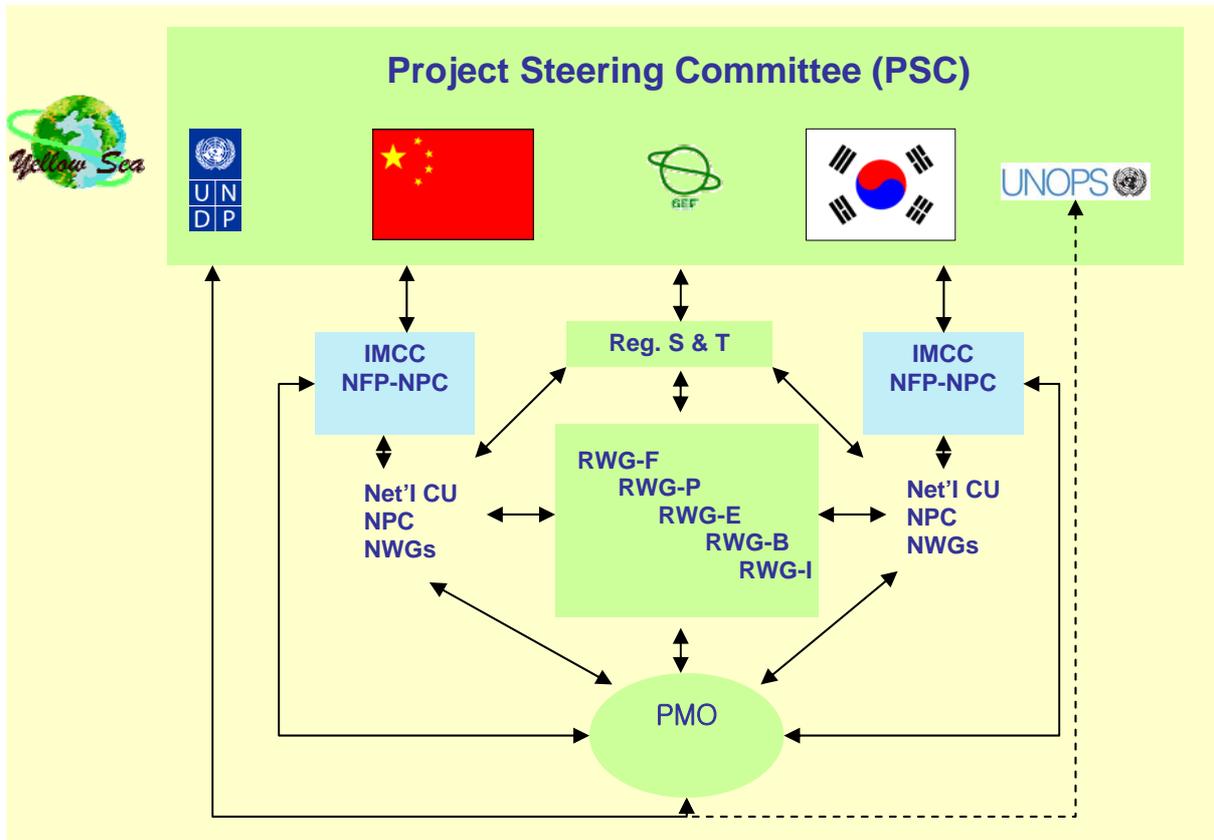
- Establishing a multi-ministry IMCC, and use the IMCC as the mechanism for nationally co-ordinating implementation of project activities; and
- Establishing appropriate linkages and co-operation with all relevant national projects in the Yellow Sea, which will assist with YSLME project implementation, as well as assist with all the co-operative projects to achieve their individual goals.

Recommendation 4. Clearly defined usage of national co-financing resources

During the project inception phase, national co-financing from the participating countries has increased dramatically from about US\$ 8 million to US\$ 13 million, which has provided a much stronger support to the project activities. During the first year of implementation, there were a number of cases that needed clear indication on the usage of national co-financing. Therefore, it is recommended that clearer indications on the use of national co-financing resources are necessary and urgent.

Annex I

Project Organisational Chart



Annex II

Cross Component Data Matrices

Overlaps in perceived problems

PROBLEM	RWG			
	Biodiversity	Ecosystem	Fisheries	Pollution
Decline in Many Commercially Important Fishery Species	^	^	X	
Lack of knowledge of Carrying Capacity			X	
Unsustainable Mariculture	^	^	X	^
Environmentally Destructive aquaculture practices	^	^	X	
Socio-economic Data Required			X	
Change in ecosystem structure	^	X	^	
Change in ecosystem productivity	^	X	^	
Habitat modification	^	X	^	
Deteriorating water quality (rivers, lakes, seas)	^	^	^	X
Decline in fish and other marine species	^	^	^	X
Deteriorating human health quality				X
Deteriorating beaches and coastal areas				X
Habitat Loss	X	^	^	
Habitat Conversion	X	^	^	
Introduced Species (includes natural and human-related)	X	^	^	
Loss of Species	X	^	^	
Degradation of Bio-Diversity	X	^	^	
X = RWG identified				
^ = overlap of problem				

Overlaps in historical data review.

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
F1. Decline in Many Commercially Important Fishery Species		Landings	Tonnes, by species	X			
		Fishing Effort	No. Boats, by fishery	X			
			HP of boats, by fishery	X			
		Composition of Catch	% Species of catch	X	^	^	
		Biological data	Growth pattern, by species	X			
			Reproduction, by Species	X	^	^	
			Spawning Season, by Species	X			
		Survey Result	Species Composition	X	^	^	
			Biomass	X			
			Environmental Characteristics	X			^
			Ichthyoplankton counts	X			
		New Survey Result	Species Composition, Biomass, Environmental Characteristics and Ichthyoplankton, etc.	X	^	^	^
		Ecological Characteristics	Migration pattern by species, spawning and nursery areas by species	X	^	^	

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>	
E1. Change in ecosystem structure	zooplankton	composition (biodiversity)	species list		X	^		
		abundance	# per volume		X	^		
		biomass	ash-free dry weight per volume		X			
	phytoplankton	composition (biodiversity)	species list		X	^		
		abundance	# per volume		X	^		
		biomass	chlorophyll a		X			
	benthic community	composition (biodiversity)	species list		X	^		
		abundance	# per area		X	^		
		biomass	ash-free dry weight per area		X			
	HAB events	species	species list		^	X		^
		density	# per volume		^	X		^
		area	sq km		^	X		^
		# events	events per year		^	X		^
		duration	days		^	X		^
damage to fisheries		money lost		^	X		^	
jellyfish events	species	species list			X			
	density	# per sq km			X			
	distribution	# per volume			X			
	duration	days			X			

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
	trophic levels	composition (biodiversity)	species list		X	^	
		abundance	# per area		X	^	
		HPLC	phytoplankton pigment wt per wt predator		X		
		gut content	preys per stomach		X		
		lipid analysis	phytoplankton pigment wt per wt predator, fatty acid wt per wt predator		X		
	fish community	composition (biodiversity)	species list	X	^	^	
		abundance	# per area	X	^	^	
	marine mammals	species	species list	^	^	X	
		distribution	# per area	^	^	X	
		population size	population	^	^		
	birds	species,	species list		^	X	
		distribution	# per area		^	X	
		population size	population		^	X	
	macro algae	composition (biodiversity)	species list, % coverage		^	X	
		abundance	# per area		^	X	
		biomass	ash-free dry weight per volume		^	X	
	seagrass	species	species list		X	^	
		distribution	areal coverage		X	^	
		area	dry wt per sq m		X	^	

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
		biomass	wet /dry wt per unit area		X	^	
E2. Change in ecosystem productivity	primary productivity	primary production	Carbon weight per sq m per day		X		
		chlorophyll a	chl a wt per vol		X		
	secondary productivity	secondary production	Carbon weight per sq m per mth or yr		X		
	benthic production	community production	C wt per sq m per yr		X		
	microbial loop production	bacterial / micro zooplankton production	Carbon weight per sq m per day		X		
	sediment profiles for POC PON	profiles	ON, OC per depth of sediment column		X		
		sediment dating	Pb-210 dating		X		
E3. Habitat modification	change in habitat areas and types	aereal coverage and type	sq km, types	^	^	X	
	physical characteristics of habitat	temperature	deg C		X		^
		salinity	psu		X		^
		current	cm per sec, direction		X		^

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
		transparency	m		X		^
	chemical characteristics of habitat	nutrients	wt per vol		^		X
		DO	% saturation		^		X
		pH	pH		^		X
		SS	mg per vol		^		X
	sedimentary characteristics of habitat	sediment types	types		X		
		redox potential	mvolt		X		
		grain size	mm		X		
B1. Habitat Loss		Change in extent (Area and Length) of selected marine and coastal habitats	Reclamation Data (includes developing and approved)		^	X	
			Artificial vs. Natural Coastline (define artificial)		^	X	
			Habitat Type (e.g. using RAMSAR Classification System for Wetland types)		^	X	
		Percentage change in marine and coastal habitats under protection	International Registered, National (all relevant departments), Provincial, County (local), by protection type.		^	X	

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
		Percentage change in marine and coastal habitats utilised for sustainable use (e.g. to encourage Ecotourism)*	Zoning Plans, National (all relevant departments), Provincial, County (local).		^	X	
B2. Habitat Conversion		Change in extent (Area) of selected marine and coastal habitats. e.g mariculture, salt pans	Habitat Type before and after, by utilisation (salt pan, mariculture, estuary barrages, etc) and by non-utilisation	^	^	X	
B3. Introduced Species (includes natural and human-related)		List of all species introduced for culture	Species, Origin and date of introduction	^	^	X	
		All species introduced to the wild through culture	Species, location, date of introduction	^	^	X	
		Abundance of introduced species	Species, abundance and distribution	^	^	X	
B4. Loss of Species		Endemic Species	Species	^	^	X	
		Vulnerable Species	IUCN Threat Categories, National Vulnerable Species Listings	^	^	X	
B5. Degradation of Bio-Diversity		Changes in genetic diversity of important bio-resources	Gene Pool Analysis	^	^	X	

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>	
P1. Deteriorating water quality (rivers, lakes, seas)	water quality characteristics	dissolved oxygen	% saturation	^	^	^	X	
			NO ₂ - µg/L	^	^	^	X	
			NO ₃ - µg/L	^	^	^	X	
			ammonium - µg/L	^	^	^	X	
			total dissolved N - µg/L	^	^	^	X	
			total particulate N	^	^	^	X	
			total dissolved P - µg/L	^	^	^	X	
			orthophosphate	^	^	^	X	
			total particulate P	^	^	^	X	
			N:P ratios	^	^	^	X	
			silicates	^	^	^	X	
			chlorophyll a - µg/L	^	^	^	X	
			carbon	total particulate C	^	^	^	X
			fecal coliform	colonies/100 ML	^	^	^	X
			COD	mg/L	^	^	^	X
			SS	mg/L	^	^	^	X
			Heavy Metals	Cd, Cr, Cu, Pb, Hg, Zn, As	^	^	^	X
			Organic Pollutants	Organotin	^	^	^	X
				Phenolic Compounds	^	^	^	X
				Oil				X
	physical characteristics	salinity	ppt	^	^	^	X	
		temperature	C	^	^	^	X	
		pH		^	^	^	X	
		transparency	m	^	^	^	X	
		circulation		^	^	^	X	

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
	biota	Heavy Metals	Cd, Cr, Cu, Pb, Hg, Zn, As	^			X
		Organic Pollutants	Organotin	^			X
			PCBs	^			X
			Dioxins and Furans	^			X
			OCPs (9):	^			X
			Aldrin, chlordane, DDT & metabolites, dieldrin, endrin, heptachlor, hexachlorbenzene, hexachlorocyclohexanes, mirex	^			X
			PAHs (16):	^			X
			Naphthalene, acenaphthylene, acenaphthene, fluorine, phenanthrene, anthracene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a] pyrene, indeno[1,2,3-cd]anthracene, benzo[ghi]perylene	^			X
		Other Substances of Concern	PBDE	^			X
			PBB	^			X
			Phenolic Compounds	^			X
		lipid		^			X
		biomarker		^			X

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
	sediment	Heavy Metals	Cd, Cr, Cu, Pb, Hg, Zn, As		^		X
		Organic Pollutants	Organotin		^		X
			PCBs		^		X
			Dioxins and Furans		^		X
					^		
			OCPs (9):		^		X
			Aldrin, chlordane, DDT & metabolites, dieldrin, endrin, heptachlor, hexachlorbenzene, hexachlorocyclohexanes, mirex		^		X
					^		
			PAHs (16):		^		X
			Naphthalene, acenaphthylene, acenaphthene, fluorine, phenanthrene, anthracene, pyrene, bezo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a] pyrene, indeno[1,2,3-cd]anthracene, benzo[ghi]perylene		^		X
		Other Substances of Concern	PBDE		^		X
			PBB		^		X

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
			Phenolic Compounds		^		X
		TPH					X
		organic C					X
		grain size					X
		sulphide					X
	Inputs (atm)	Heavy Metals	Pb, Hg				X
			PCBs				X
			OCPs (9):				X
			Aldrin, chlordane, DDT & metabolites, dieldrin, endrin, heptachlor, hexachlorbenzene, hexachlorocyclohexanes, mirex				X
			PAHs (16):				X
			Naphthalene, acenaphthylene, acenaphthene, fluorine, phenanthrene, anthracene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a] pyrene, indeno[1,2,3-cd]anthracene, benzo[ghi]perylene				X
		Other Substances of	PBDE				X

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
P2. decline in fish and other marine species	disease and death in marine organisms	harmful algal bloom	# occurrences	^	^	^	X
			duration	^	^	^	X
			month of occurrence	^	^	^	X
			areal size of occurrence	^	^	^	X
		parasites	# occurrences	^	^	^	X
			duration	^	^	^	X
			month of occurrence	^	^	^	X
			areal size of occurrence	^	^	^	X
		fisherfolk income	gross annual income per household	^			X
P3. deteriorating human health quality	death and disease in humans	loss of labour pool	# of able-bodied persons not employed				X
		nat'l/individual insurance costs	average insurance premium costs in USD				X
		hospitalization / outpatient fee	fee in USD				X
		introduced human-affected diseases	#, type of new diseases				X
P4. deteriorating beaches and coastal areas	quality of recreational areas	fecal coliform	colonies/100 ML				X
		enterococcus	colonies/100 ML				X
		litter					X
		transparency	m				X
		sewage					X
	income from tourism		USD				X

<u>Problem</u>		<u>Type of Data Required to detect problem</u>	<u>Type, Unit:</u>	<u>Fisheries</u>	<u>Ecosystem</u>	<u>Biodiversity</u>	<u>Pollution</u>
		activities					
X = will collect data							
^ = can use/ need / benefit from data							

Overlaps in joint cruise data collection.

Variables for joint cruise survey		Ecosystem	Fisheries	Biodiversity	Pollution (water)	Pollution (sediment)	Pollution (biota)	Wetland Int'l can provide
E1. oceanographic variables	CTD with PAR, beam-transmission, fluorescence	X						
	Nutrients (by Pollution Group) - see P2	^			X	X		
E2. Phytoplankton	Phytoplankton species counts	X		^				
	Size-fractionated biomass (chl-a) and primary production	X						
	Pico-phytoplankton cell counts and primary production	X						
	Bio-optics (down-welling and upwelling spectral radiance, attenuation, HPLC, particulate absorption, pigment absorption, etc)	X						
E3. zooplankton	Zooplankton species abundance	X		^				
	Meso-zooplankton biomass	X						
	Meso-zooplankton fecal pellet production	X						
	[Meso-zooplankton egg production]	-						
	[Vertical distribution of fecal pellets from water sample]	-						
	[Zooplankton vertical distribution, in selected station(s), using MOCNESS (or MPS)]	-						

Variables for joint cruise survey		Ecosystem	Fisheries	Biodiversity	Pollution (water)	Pollution (sediment)	Pollution (biota)	Wetland Int'l can provide
E4. benthos	Grab sample for benthos species diversity, abundance, and biomass	X		^			^	
	Grain size of the bottom sediment	X						
	Sediment organic content	X				^		
	[sediment coring sample (<1m length)]	-						
	[bottom Temperature, Salinity, and Oxygen content] - see P1	-			X			
E5. Bacteria	Bacterial abundance & biodiversity	X		^				
	Heterotrophic bacterial production	X						
	[Limiting resources for bacterial growth (potential impact by yellow sand)]	-						
	[Heterotrophic bacterial respiration]	-						
E6. Protozoa	Protistan (flagellate & ciliates, etc.) abundance and composition	X		^				
	[Protozoan grazing on the picoplankton]	-						
F1. Experimental trawl survey	Species composition	^	X	^			^	
	Size composition of dominant species	^	X	^				
	Geographical distribution, abundance	^	X	^				

Variables for joint cruise survey		Ecosystem	Fisheries	Biodiversity	Pollution (water)	Pollution (sediment)	Pollution (biota)	Wetland Int'l can provide
	Stomach contents (foods): about 30 specimens for each dominant species	^	X					
	Ages (if necessary)		X	^				
F2. Ichthyoplankton	Density of early stage by dominant species		X	^				
F3. Acoustic survey: follow the survey stations	Abundance by dominant pelagic species and zoo plankton	^	X	^				
F4. Fishing ground condition: depends on the other components' survey items	Water temperature and salinity by depth		X		^			
	Food (chlorophyll, Zoo plankton)	^	X	^				
F5. Carrying capacity: depends on the pollution component's survey items (If they don't cover all of the items as follows, it is necessary to sample about 2 litres of water as well as temperature, salinity and DO)	Water temperature, salinity, DO, COD, Nutrients (N, P), POC, DOC by depth (surface, mid and bottom) at each survey station		X		X			
B1. Saltpan Extent		^		^	^	^		X

Variables for joint cruise survey		Ecosystem	Fisheries	Biodiversity	Pollution (water)	Pollution (sediment)	Pollution (biota)	Wetland Int'l can provide
B2. Mariculture Extent		^	^	^	^	^		X
P1. routine parameters	temp, pH, salinity, transparency, DO, COD, SS, chlorophyll a		^		X			
P2. nutrients	nitrate, nitrite, ammonium, phosphate, silicate		^		X	X		
P3. organic pollutants	TOC, oil, PAH, PCB, OCP				X	X	X	
P4. heavy metals	Cd, Cr, Cu, Pb, Hg, Zn, As				X	X	X	
X = will collect								
^ = need data or can benefit from data								
- = optional to collect								

Annex III

Expenditures and Balance of the Project (as of 25 November 2005)

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
1000	Personnel								
1100	International Experts								
1101	Programme Manager	934,271	-88,170	171,919	-158,979	12,940	-27,910	-186,889	-14,970
1102	Environ Officer	603,399	0	109,200	-110,185	-985	-16,263	-126,448	-17,248
1103	Fisheries Officer	603,399	0	109,200	-84,212	24,988	-16,159	-100,371	8,829
1104	Economist	603,399	0	109,200	0	109,200	-44,649	-44,649	64,551
1199	Sub Total	2,744,468	-88,170	499,519	-353,375	146,144	-104,981	-458,356	41,163
1200	Short-term Consultants								
1201	Stock assessment (tasks:1.1-1.5) (1.5 w/m)	14,000	0	14,000	0	14,000	-14,000	-14,000	0
1202	Carry capacity (tasks: 2.1-2.2) (2 w/m)	10,500	0	10,500	0	10,500	-10,500	-10,500	0
1203	Mariculture (tasks: 3.1-3.4) (1.5 w/m)	10,500	0	10,500	0	10,500	-10,500	-10,500	0
1204	Feasibility study on the regional agreement, i.e. FAO code of conduct	7,000	0	7,000	0	7,000	-7,000	-7,000	0
1205	Legislation (task:4.1-4.3)	21,000	0	7,000	0	7,000	0	0	7,000
1206	SAP-fisheries		0	0	0	0	0	0	0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
		14,000							
1207	Habitats review (tasks: 1.1-1.4) (1.5 w/m)	-	0	0	0	0	0	0	0
1208	Vulnerable Species (tasks: 2.1-2.4) (2 w/m)	14,000	0	7,000	0	7,000	-7,000	-7,000	0
1209	Genetic Diversity (tasks: 3.1-3.3) (1 w/m)	-	0	0	0	0	0	0	0
1210	Invented species (tasks: 4.1-4.5) (1.5 w/m)	-	0	0	0	0	0	0	0
1211	Contaminant Inputs (tasks: 1.1-1.4)	10,500	0	10,500	0	10,500	-10,500	-10,500	0
1212	Contaminant monitory (tasks: 2.1-2.3)	14,000	0	14,000	-1,000	13,000	-13,000	-14,000	0
1213	Hot spot (tasks (4.1-4.5)	14,000	0	0	0	0	0	0	0
1214	Emergency Planning and Preparedness (tasks (5.1-5.3)	-	0	0	0	0	0	0	0
1215	Legal and Regulatory (tasks 6.1-6.4)	14,000	0	0	0	0	0	0	0
1216	Prepare state-of-ecosystem reviews and reports (tasks 1.1-1.5)	14,000	0	14,000	0	14,000	-14,000	-14,000	0
1217	Carrying Capacity of Ecosystem (tasks:consultant 2.1-2.7)	7,000	0	7,000	0	7,000	-7,000	-7,000	0
1218	Identify and rank stresses on the ecosystem	10,500	0	0	0	0	0	0	0
1219	Review preliminary TDA, and suggest improvements (Tasks:consultant 1.1-1.3 (2.5 w/m)	17,500	0	17,500	0	17,500	0	0	17,500

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
1220	Reg. SAP consultant (Consultant 3.1-3.4 (3 w/m))	21,000	0	0	0	0	0	0	0
1221	Prepare proposal on continuation of the project preparation and feasibility studies for long-term environmental investment (tasks:consultant 5.1-5.2 (1.5 w/m))	-	0	0	0	0	0	0	0
1222	Data & info. Management system	7,000	0	7,000	0	7,000	0	0	7,000
1223	Consultants unspecified	140,000	0	30,000	-2,072	27,928	0	-2,072	27,928
1299	Sub Total	360,500	0	156,000	-3,072	152,928	-93,500	-96,572	59,428
1300	Supporting staff								
1301	Secretary	158,112	0	28,614	-24,004	4,610	-5,216	-29,220	-606
1302	Driver	123,770	0	24,029	-22,173	1,856	-4,381	-26,554	-2,525
1303	Adm. Asst.	143,532	0	28,614	-26,400	2,214	-5,216	-31,616	-3,002
1304	Adm. Officer	227,922	-4,016	48,194	-44,462	3,732	-8,785	-53,247	-5,053
1305	IT supporting staff	143,532	0	28,614	-25,234	3,380	-5,216	-30,450	-1,836
1399	Sub Total	796,868	-4,016	158,065	-142,273	15,792	-28,814	-171,087	-13,022
1500	Duty Travel								
1501	PCU/International Expert Travel	397,040	-4,163	77,800	-72,556	5,244	-28,178	-100,735	-22,935
1599	Sub Total	397,040	-4,163	77,800	-72,556	5,244	-28,178	-100,735	-22,935

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
1600	Mission Costs								
1601	Annual Tri Part Review (IVB)	40,000	0	8,000	0	8,000	0	0	8,000
1602	Interviews/Travel (CTA Prospects) (IVB)	20,000	-10,879	20,000	0	20,000	-9,121	-9,121	10,879
1699	Sub Total	60,000	-10,879	28,000	0	28,000	-9,121	-9,121	18,879
1700	(Nat'I Project Professional Personnel) NPPP								
1701	Mariculture Advisor	83,000	0	11,000	0	11,000	0	0	11,000
1702	Biodiversity Advisor	76,800	0	0	0	0	0	0	0
1703	Ecosystem Advisor	30,000	0	0	0	0	0	0	0
1704	NCU Coordinator (K)	300,000	0	60,000	0	60,000	-45,000	-45,000	15,000
1705	NCU Coordinator (C)	174,200	0	34,800	0	34,800	-26,100	-26,100	8,700
1706	TDA NPPP	50,000	0	0	0	0	0	0	0
1707	DIM Consultants	160,000	0	40,000	0	40,000	0	0	40,000
1799	Sub Total	874,000	0	145,800	0	145,800	-71,100	-71,100	74,700
1999	COMPONENT TOTAL	5,232,876	-107,228	1,065,184	-571,276	493,908	-335,695	-906,971	158,213
2000	Contracts								
2100	Subcontracts								
2101	Stock assessment (tasks:1.1-1.5)		0	90,000	0	90,000	-89,242	-89,242	758

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
		90,000							
2102	Revise natl stock assessment (tasks:2.1 - 2.3)	5,000	0	5,000	0	5,000	0	0	5,000
2103	Perform reg. stock assessment	240,000	0	80,000	0	80,000	-80,000	-80,000	0
2104	Annual carrying capacity determination	120,000	0	0	0	0	0	0	0
2105	Implement mariculture techniques.	190,000	0	0	0	0	0	0	0
2106	Implement Reg Fisheries and ecosystem Management / Implementation Plans	180,000	0	0	0	0	0	0	0
2107	Ship rental	610,000	0	210,000	0	210,000	-232,453	-232,453	-22,453
2108	Review existing national practices of coastal habitat use, conservation, & restoration (tasks: 1.1-1.3)	100,000	0	60,000	-14,900	45,100	-41,800	-56,700	3,300
2109	Implement Regional Strategy for Conservation Areas	225,000	0	0	0	0	0	0	0
2110	Implement regionally coordinated strategies for protection of vulnerable species	-	0	0	0	0	0	0	0
2111	Review national info (tasks: contract 1.1-1.9)	90,000	0	90,000	0	90,000	-89,975	-89,975	25
2112	Environmental Survey with other working groups	240,000	0	120,000	0	120,000	-99,150	-99,150	20,850

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
2113	Intercalibration exercise	22,000	0	22,000	0	22,000	-22,000	-22,000	0
2114	Develop funding mechanism to implement the regional strategy	300,000	0	0	0	0	0		0
2115	Practice & Intercalibration of the procedure	25,000	0	0	0	0	0		0
2116	ICM actions for controlling of discharge of contaminants and nutrients	40,000	0	0	0	0	0		0
2117	Facilitate implementation of procedures for re-mediation and prevention.	40,000	0	0	0	0	0		0
2118	National reviews (tasks: contract 1.1-1.4)	90,000	0	90,000	-18,000	72,000	-71,268	-89,268	732
2119	Demonstration of new and innovative technologies for monitoring	45,000	0	0	0	0	0		0
2120	Develop strategy to identify long-term sustainable investments	60,000	0	0	0	0	0		0
2121	Conduct a basin-scale survey on lower-trophic level ecosystem	270,000	0	90,000	0	90,000	-90,000	-90,000	0
2123	Stakeholders activities (Tasks: contract 1.1-1.4)	24,000	0	10,000	0	10,000	0	0	10,000
2124	The Yellow Sea and Youth	32,000	0	0	0	0	0		0
2125	regular stakeholders conference (1/yr)	16,000	0	0	0	0	0		0
2126	Contact for NYSAP	29,000	0	0	0	0	0		0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
2127	Strengthen national institutions (tasks: contract 3.1-3.3)	35,000	0	14,000	0	14,000	0	0	14,000
2128	Provide matched funds for the approved projects (contracts)	-	0	0	0	0	0	0	0
2129	Demonstration projects on sustainable investment	1,100,000	0	0	0	0	0	0	0
2130	Organise public awareness conferences	14,000	0	0	0	0	0	0	0
2131	Preparation of public awareness materials	22,000	0	12,000	0	12,000	0	0	12,000
2132	Produce project pins, mouse pads etc.	15,000	0	15,000	0	15,000	-5,000	-5,000	10,000
2133	National co-ordinating mechanism (C)	177,900	0	35,580	0	35,580	-26,400	-26,400	9,180
2134	National co-ordinating mechanism (K)	52,100	0	10,420	0	10,420	-7,500	-7,500	2,920
2135	Other contracts	573,000	0	114,000	0	114,000	-4,200	-4,200	109,800
2199	Sub Total	5,072,000	0	1,068,000	-32,900	1,035,100	-858,988	-891,888	176,112
2999	COMPONENT TOTAL	5,072,000	0	1,068,000	-32,900	1,035,100	-858,988	-891,888	176,112
3000	Training & meeting								
3100	Fellowship								
3101	Intern programme	120,000	0	24,000	0	24,000	0	0	24,000
3102	Other fellowships		0	10,000	0	10,000	0	0	10,000

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			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
		50,000							
3199	Sub Total	170,000	0	34,000	0	34,000	0	0	34,000
3200	Group training								
3201	Reg. training on carrying capacity	-	0	0	0	0	0	0	0
3202	Reg. training on mariculture techniques	20,000	0	0	0	0	0	0	0
3203	Reg training on disease diagnosis, prevention and control	20,000	0	0	0	0	0	0	0
3204	Training Course on genetic techniques	-	0	0	0	0	0	0	0
3205	Reg. training on regulation and control of exotic species.	-	0	0	0	0	0	0	0
3206	Training on contaminant monitoring	20,000	0	20,000	0	20,000	0	0	20,000
3207	training & intercalbration on assessment	-	0	0	0	0	0	0	0
3208	Reg training on carrying capacity of ecosystem	20,000	0	0	0	0	0	0	0
3209	Training course on monitoring HAB	-	0	0	0	0	0	0	0
3210	Training for decision makers (Training 1)	20,000	0	0	0	0	0	0	0
3211	Training for community trainers (Training 2)	20,000	0	0	0	0	0	0	0
3212	Training for local governmental officers (training 3)	20,000	0	0	0	0	0	0	0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
3213	Training on Project document preparation	20,000	0	0	0	0	0	0	0
3214	Training on Fund raising	20,000	0	0	0	0	0	0	0
3215	Training on DIM	20,000	0	0	0	0	0	0	0
3216	Public awareness training-1	40,000	0	20,000	0	20,000	0	0	20,000
	Public awareness training-2	-	0	0	0	0	0	0	0
3217	Other trainings	400,000	0	80,000	-1,438	78,562	0	-1,438	78,562
3299	Sub Total	640,000	0	120,000	-1,438	118,562	0	-1,438	118,562
3300	Meetings Conference								
3301	Project Steering Committee meetings	90,000	0	18,000	-13,060	4,940	-11,960	-25,020	-7,020
3302	Technical Working Group meetings	125,000	-9,767	25,000	-23,687	1,313	-18,916	-42,603	-17,603
3303	Regional scientific conference	240,000	0	0	0	0	0	0	0
3304	Reg WG-F (meeting 1; tasks: 1.1.-1.4)	17,500	0	17,500	-4,164	13,336	0	-4,164	13,336
3305	Reg WG-F (meeting 2; tasks: 2.1 - 2.5)	17,500	0	17,500	0	17,500	-11,504	-11,504	5,996
3306	Reg WG-F (meeting 3; tasks: 3.1 - 3.10)	22,500	0	0	0	0	0	0	0
3307	Reg WG-F (meeting 4; tasks: 4.1)	17,500	0	0	0	0	0	0	0
3308	Reg WG-F (meeting5; tasks: 5.1 - 5.6)	20,000	0	0	0	0	0	0	0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
3309	Reg WG-F (meeting 6; tasks: tbd)	20,000	0	0	0	0	0	0	0
3310	Reg WG-B (meeting 1; tasks: .1.1-1.6)	17,500	0	17,500	-3,436	14,064	0	-3,436	14,064
3311	Reg WG-B (meeting 2; tasks: 2.1-2.6)	17,500	0	17,500	0	17,500	-13,057	-13,057	4,443
3312	Reg WG-B (meeting 3; tasks: 3.1-3.3)	17,500	0	0	0	0	0	0	0
3313	Reg WG-B (meeting 4; tasks: 4.1-4.4)	17,500	0	0	0	0	0	0	0
3314	Reg WG-B (meeting 5; tasks: 5.1)	17,500	0	0	0	0	0	0	0
3315	Reg WG-B (meeting6; tasks: tbd)	17,500	0	0	0	0	0	0	0
3316	WG-P meeting 1 (tasks: meeting 1.1-1.5)	15,000	0	15,000	-8,017	6,983	0	-8,017	6,983
3317	WG-P meeting 2 (tasks: meeting 2.1-2.7)	17,500	0	17,500	0	17,500	-9,552	-9,552	7,948
3318	WG-P meeting 3 (tasks: meeting 3.1-3.5)	17,500	0	0	0	0	0	0	0
3319	WG-P meeting 4 (tasks: meeting 4.1-4.6)	17,500	0	0	0	0	0	0	0
3320	WG-P meeting 5 (tasks: meeting 5.1-5.2)	17,500	0	0	0	0	0	0	0
3321	WG-P meeting 6 (tasks: tbd)	15,000	0	0	0	0	0	0	0
3322	WG-Eco meeting 1(tasks: meeting 1.1-1.3)	15,000	0	15,000	-10,902	4,098	0	-10,902	4,098
3323	WG-Eco meeting 2(tasks: meeting 2.1-2.5)	17,500	0	17,500	0	17,500	-17,500	-17,500	0
3324	WG-Eco meeting 3(tasks: meeting 3.1-		0	0	0	0	0	0	0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
4101	Office supplies	54,000	-913	18,000	-4,820	13,180	-3,000	-7,820	10,180
4102	Library acquisitions	5,000	0	2,000	0	2,000	0	0	2,000
4103	GIS Software	8,000	0	8,000	0	8,000	0	0	8,000
4104	Computer Software	11,000	-640	5,000	-4,995	5	-2,855	-7,850	-2,850
4199	Sub Total	78,000	-1,553	33,000	-9,815	23,185	-5,855	-15,670	17,330
4200	Non-expendable equipment (computers, office equip, etc)								
4201	Computers	50,000	-5,399	15,000	-3,467	11,533	-1,875	-5,342	9,658
4202	GIS workstation	3,000	0	3,000	0	3,000	0	0	3,000
4203	Printers	3,000	0	2,000	0	2,000	0	0	2,000
4204	Copy machine (small size)	3,500	0	3,500	-550	2,950	0	-550	2,950
4205	PowerPoint OHP	6,200	-3,459	6,200	0	6,200	0	0	6,200
4206	Automobile	25,000	-22,881	25,000	0	25,000	0	0	25,000
4207	Equipment for regional survey (f)	60,000	0	20,000	0	20,000	0	0	20,000
4208	Sea-going equipment	360,000	0	300,000	0	300,000	-200,000	-200,000	100,000
4209	Equipment for DIM	44,000	0	30,000	0	30,000	-18,220	-18,220	11,780
4210	Equipment unspecified		0	12,000	-1,215	10,785	-4,230	-5,445	6,555

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
		84,000							
4299	Sub Total	638,700	-31,739	416,700	-5,232	411,468	-224,325	-229,557	187,143
4300	Premises (office rent, maintenance, of premises, etc)								
4301	Office rent	-	0	0	0	0	0	0	0
4302	Furniture	18,000	-6,123	12,000	-4,796	7,204	0	-4,796	7,204
4303	unspecified costs	25,000	0	5,000	0	5,000	0	0	5,000
4399	Sub Total	43,000	-6,123	17,000	-4,796	12,204	0	-4,796	12,204
4999	COMPONENT TOTAL	759,699	-39,414	466,700	-19,844	446,856	-230,180	-250,024	216,676
5000	MISCELLANEOUS COMPONENT								
5100	Operation and maintenance of equip.								
5101	Rental & maint. of computer equip.	15,000	0	3,000	0	3,000	0	0	3,000
5102	Rental & maint. of copiers	7,500	0	1,500	0	1,500	0	0	1,500
5103	Repair & maint. of vehicles & insurance	40,000	0	8,000	-2,992	5,008	-2,000	-4,992	3,008
5104	Rental & maint. of other office equip	12,500	0	2,500	0	2,500	0	0	2,500
5105	Rental of meeting rooms & equip.	10,000	0	2,000	-1,209	791	-1,530	-2,739	-739
5199	Sub Total	85,000	0	17,000	-4,200	12,800	-3,530	-7,730	9,270

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
5200	Reporting costs (publications, maps, newsletters, printing, etc)								
5201	Stock assessment report	4,000	0	0	0	0	0	0	0
5202	Carrying capacity report	3,000	0	0	0	0	0	0	0
5203	Existing laws & regulation	4,000	0	0	0	0	0	0	0
5204	Review national practices of coastal habitat use, conservation, and restoration.	3,000	0	0	0	0	0		0
5205	Review of status of vulnerable species and vulnerable trophic linkages.	3,000	0	0	0	0	0		0
5206	Regional contaminant inputs	3,000	0	0	0	0	0		0
5207	Investment strategy	3,000	0	0	0	0	0		0
5208	Strategies for rapid & long-term regional responses to catastrophic causes of pollution	-	0	0	0	0	0		0
5209	Review report of national legislation on pollution	3,000	0	0	0	0	0		0
5210	Review of fate and transport of contaminants	3,000	0	0	0	0	0		0
5211	Regional carrying capacity of ecosystem	3,000	0	0	0	0	0		0

IMIS Code	IMIS Code Description	Original Budget	Yr2004	FY2005					
			Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
5212	Ecosystem stresses-national & regional status	3,000	0	0	0	0	0	0	0
5214	printing newsletters	5,000	0	1,000	0	1,000	0	0	1,000
5215	Printing the final TDA	3,000	0	0	0	0	0	0	0
5216	Printing NYSAP	3,000	0	0	0	0	0	0	0
5217	Printing regional SAP	3,000	0	0	0	0	0	0	0
5219	Other reportings	68,000	0	8,000	-489	7,511	-5,500	-5,989	2,011
5220	Publication (other than reports)	53,000	0	5,000	-4,955	45	0	-4,955	45
5221	Webpage designee and updating	5,000	0	3,000	-356	2,644	0	-356	2,644
5299	Sub Total	175,000	0	17,000	-5,800	11,200	-5,500	-11,300	5,700
5300	Sundry (communications, postage, freight, clearance charges, etc)								
5301	Communication	77,000	-6,139	12,000	-2,311	9,689	-1,545	-3,855	8,145
5302	postage/freight	6,250	0	1,250	-1,239	11	0	-1,239	11
5303	unspecified	45,000	-67	9,000	-6,992	2,008	-1,000	-7,992	1,008
5399	Sub Total	128,250	-6,206	22,250	-10,542	11,708	-2,545	-13,087	9,163
5400	Hospitality and entertainment								
5401	Hospitality and entertainment	28,000	0	4,000	-301	3,699	0	-301	3,699

			Yr2004	FY2005					
IMIS Code	IMIS Code Description	Original Budget	Exp 2004 Jul~Dec	Yr 2005 Budget	Expenditure 2005 Jan-Oct	Yr2005 Bal Jan-Oct	Est.Exp 2005 Nov~Dec	Total Expenditures 2005 Jan-Dec	Est. Yr1 Bal
5499	Sub Total	28,000	0	4,000	-301	3,699	0	-301	3,699
5500	Evaluation (consultants fees/travel/DSA, admin support, etc. internal projects)								
5501	Evaluation (consultants fees/travel/DSA)	96,000	0	0	0	0	0	0	0
5599	Sub Total	96,000	0	0	0	0	0	0	0
5600	UNOPS Project Supporting Cost								
5699	Sub Total	-	0	0	0	0	0	0	0
5999	COMPONENT TOTAL	512,250	-6,206	60,250	-20,844	39,406	-11,575	-32,418	27,832
	TOTAL	13,579,326	-162,616	3,059,634	-720,914	2,338,720	1,530,752	-2,251,666	807,968
5600-5	UNOPS Project Supporting Cost (6%)	814,760	-9,757	183,578	-43,255	140,323	-91,845	-135,100	48,478
	GRAND TOTAL	14,394,086	-172,373	3,243,212	-764,169	2,479,043	1,622,597	-2,386,766	856,446

Annex IV

List of Meetings Convened by Project: 2004 to 2005

14-16 Dec 2004	First Regional Technical Meeting, Beijing, China
3-5 March 2005	Second Regional Technical Meeting, Ansan, Korea
7 March 2005	Project Launching Ceremony, Seoul, Korea
7-8 March 2005	1 st Project Steering Committee Meeting, Seoul, Korea
6-9 April 2005	1 st Regional Working Group Meeting – Pollution, Qingdao, China
11-14 April 2005	1 st Regional Working Group Meeting – Fisheries, Qingdao, China
18-22 April 2005	1 st Regional Working Group Meeting – Biodiversity, Qingdao, China
10-13 May 2005	1 st Regional Working Group Meeting – Ecosystem, Geoje Island, Korea
17-20 May 2005	1 st Regional Working Group Meeting – Investment, Yantai, China
4-6 July 2005	1 st Regional Science and Technical Panel Meeting, Dalian, China
7-10 Nov 2005	2 nd Regional Working Group Meeting – Pollution, Busan, Korea
9-12 Nov 2005	2 nd Regional Working Group Meeting – Biodiversity, Jeju, Korea
14-19 Nov 2005	2 nd Regional Working Group Meeting – Investment, Jeju, Korea
17-20 Nov 2005	2 nd Regional Working Group Meeting – Fisheries, Busan, Korea
29 Nov–2 Dec 2005	2 nd Regional Working Group Meeting – Ecosystem, Shanghai, China
15-17 Dec 2005	2 nd Regional Science and Technical Panel Meeting, Kunming, China
19-20 Dec 2005	2 nd Project Steering Committee Meeting, Kunming, China

Annex V

List of Acronyms

DIM	Data and information management
FAO	Food and Agricultural Organisation
FIO	First Institute of Oceanography
GEF	Global Environment Facility
GIS	Geographic Information System
GOOS	Global Ocean Observing System
IMCC	Inter-ministerial Co-ordinating Committee
IOC	Intergovernmental Oceanographic Commission
KORDI	Korea Ocean Research and Development Institute
MOU	Memorandum of Understanding
MSC	Marine Stewardship Council
NEAR-GOOS	Northeast Asian Regional Global Ocean Observing System
NFRDI	National Fisheries Research and Development Institute - Korea
NGOs	Non-Governmental Organizations
NMEMC	National Marine Environmental Monitoring Center - China
NOWPAP	Northwest Pacific Action Plan
NPC	National Project Co-ordinator
NWG	National Working Group
PMO	Project Management Office
PSC	Project Steering Committee
RSTP	Regional Scientific and Technical Panel
RWG	Regional Working Group
RWG-F, E, B, P, I	Regional Working Group – Fisheries, Ecosystem, Biodiversity, Pollution, Investment
SAP	Strategic Action Programme
SHMA	State Hydrometeorological Administration – DPR Korea
SOA	State Oceanic Administration - China
TDA	Transboundary Diagnostic Analysis
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNOPS	United Nations Office for Project Services
WI	Wetlands International
WSFRI	West Sea Fisheries Research Institute - Korea
WWF	World Wide Fund for Nature
YSEPP	Yellow Sea Eco-region Planning Programme
YSLME	Yellow Sea Large Marine Ecosystem