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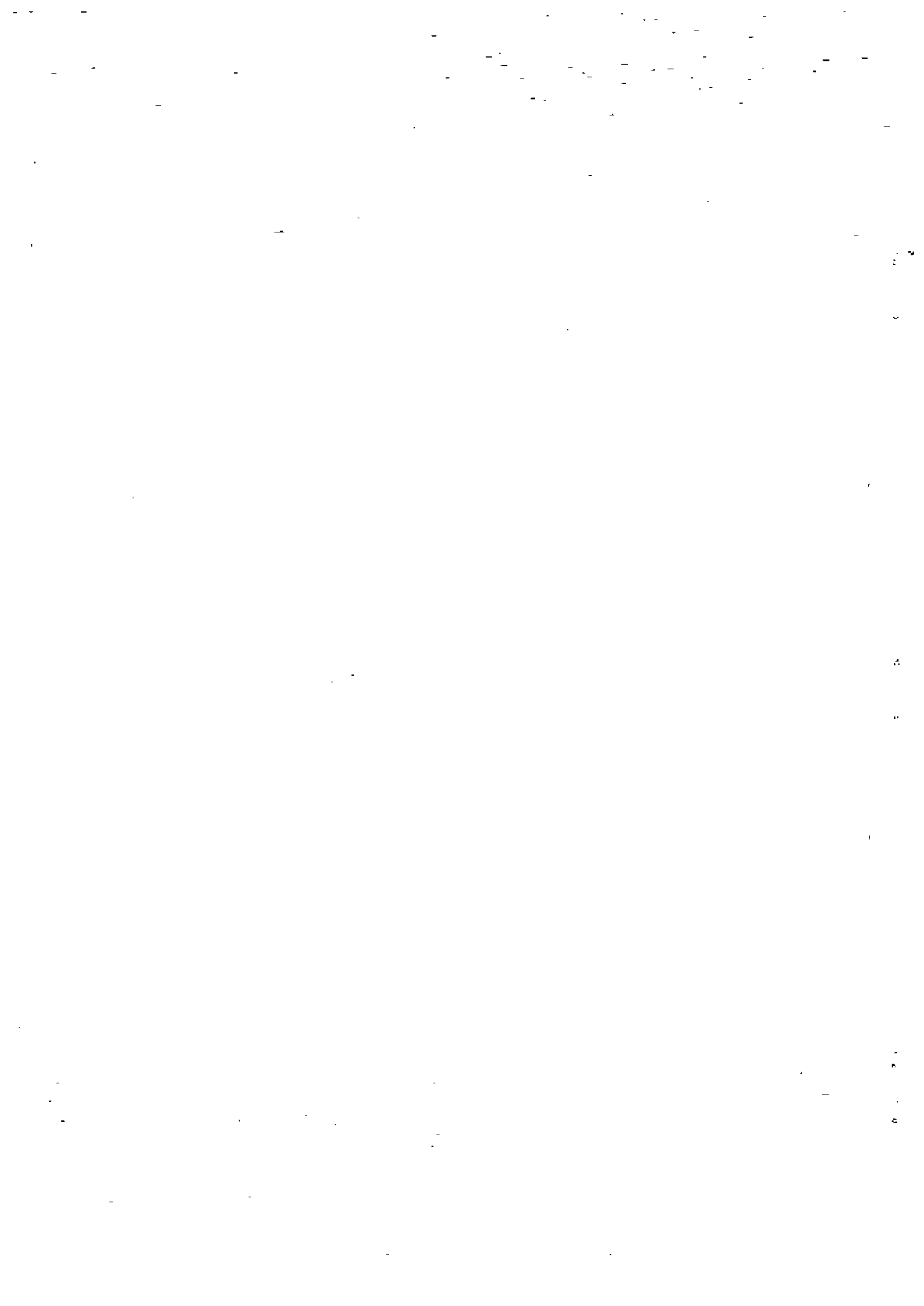
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Fifth Meeting of the Co-ordinating Body
on the Seas of East Asia (COBSEA)

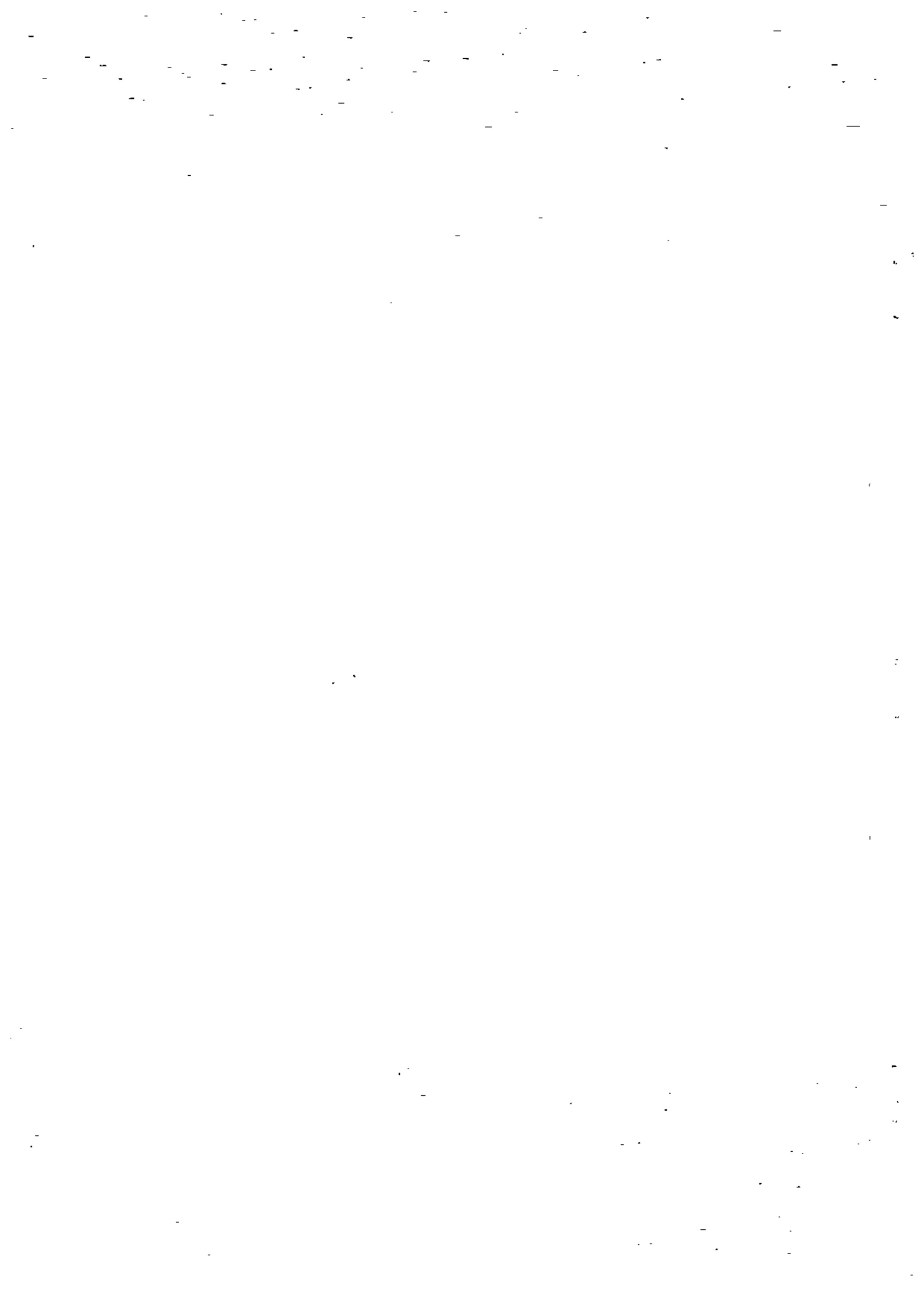
Singapore, 25-26 April 1986

REPORT OF THE
FIFTH MEETING OF THE CO-ORDINATING BODY
ON THE SEAS OF EAST ASIA



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INTRODUCTION

1. The Intergovernmental Meeting on the East Asian Seas Action Plan, held in Bangkok, 9-11 December 1981 formed a Co-ordinating Body on the Seas of East Asia (COBSEA), to serve as the overall authority to determine the contents of the Action Plan, to review its progress and approve its programme of implementation through periodic meetings of governments.

2. In accordance with this decision, the Fifth Meeting of the COBSEA was convened by the Executive Director of the United Nations Environment Programme (UNEP) in Singapore, 25-26 April 1986.

ATTENDANCE

3. Representatives from Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand attended. Observers from ESCAP, UNDP, UNEP/ROAP, UNESCO, IOC, ASCOPE, IDRC and IUCN and were also present. The list of participants appears as annex I.

Agenda Item 1: Opening of the meeting

4. Mr. S. Keckes, Director, Oceans and Coastal Areas Programme Activity Centre, UNEP, in his opening address welcomed the participants to the meeting on behalf of the Executive Director and specifically expressed the satisfaction of his organization at the presence of representatives from Brunei Darussalam. He emphasized UNEP's interest in and support of the Action Plan as part of the Regional Seas Programme and indicated the readiness of his organization to continue providing the secretariat functions for the Action Plan, including being the technical co-ordinator of the implementation of the EAS projects endorsed by COBSEA, as well as for the management of the EAS Trust Fund.

Agenda Item 2: Organization of the meeting

2.1 Designation of officers

5. Consistent with the procedures used by the ASEAN Experts Group on the Environment, i.e. that the Chairman, Vice-Chairman, and Rapporteur of COBSEA would be designated on the same rotational basis, the following were elected by acclamation:

Chairman	: Mr. Richard Lau (Singapore)
Vice-Chairman	: Mr. Pravitt Ruyabhorn (Thailand)
Rapporteur	: Mr. Haji Ibrahim Hj Mat Yassin (Brunei Darussalam)
Interim Co-ordinator	: Mr. A. Maheswaran (Malaysia)

2.2 Adoption of the agenda

6. The meeting adopted the agenda which appears as annex II.
7. A list of documents made available to participants is contained in annex III of this report.

Agenda Item 3: Report of the Interim Co-ordinator of COBSEA

8. Mr. A. Maheswaran, the Interim Co-ordinator noted that the EAS Action Plan which has been in existence since 1981 has contributed significantly to the management and protection of the region's marine environment. He spoke of the need to address other environmental problems like siltation and sedimentation, mining, dredging effects, reclamation effects and thermal pollution. However, the limited resource of the Trust Fund contributed to a serious set-back in implementing a comprehensive action plan. He hoped that more funding assistance would be forthcoming from the several funding agencies' representatives present.

9. The Interim Co-ordinator also spoke of the need to enhance complementary sub-regional activities to deal effectively with the environmental problems of the sea. These include a Tripartite Technical Experts Group, the Traffic Separation Scheme, the Oil Pollution Contingency Plans, etc.

Agenda Item 4: Report of the Executive Director of UNEP

10. Mr. S. Keckes introduced the report of the Executive Director (document UNEP/IG.65/4), concentrating on administrative and financial aspects of the Action Plan, including the present status of the EAS Trust Fund. The Executive Director recommended the following:

- an in-depth evaluation of the results achieved in the projects carried out under the Action Plan in order to analyse their effectiveness and contribution to the principal objective of the Action Plan. Such an evaluation may assist COBSEA to define a long-term strategy which could be followed in the forthcoming decade and could help the Executive Director to justify UNEP's continued involvement in and support of the Action Plan;
- preparation of a regional overview on the state of the marine environment of the EAS region, as part of the preparation of a global overview sponsored by UNEP;
- establishment of an efficient information system for exchange of news about and data resulting from EAS projects. Such a system could be based on one central or several specialised data banks linked together in a regional network and on a periodically issued newsletter;
- strengthening the co-operation between scientists and scientific institutions which participate or which may participate in the Action Plan. Such co-operation, which may be formalized through a meeting of scientists to review the regional report on the state of the marine environment and the scientific results of the EAS projects, could lead to the establishment of a scientific advisory body to COBSEA; and

- initiation of a regional project dealing with marine mammals.

11. In closing his presentation, Mr. S. Keckes indicated that UNEP funds are available to support the activities listed above, under the conditions described in document UNEP/IG.65/4.

Agenda Item 5: Progress report on ongoing EAS Action Plan projects

12. The Thai delegation summarized the progress on EAS 1.1 "Observation of Maritime Meteorological Phenomena and their Influence on Water Movements," and EAS 1.2 "Study of Oceanographic Features with Emphasis on Hydrography, Water Masses, Water Circulation and their Effects upon Pollution Dispersion Patterns". With respect to EAS 1.1 preparation of a report on coastal meteorological phenomena based on secondary data has been completed and published under the title "Climate of the Coastal Areas surrounding the South China Sea". Equipment for deployment at permanent meteorological stations in the Gulf of Thailand was acquired in early 1985.

13. For EAS 1.2, three current meters were installed in the field at selected permanent stations, Maboonklong Jetty and Pilot Station. Difficulties with the equipment and operation had been experienced and the meters had to be returned to the company Sensordata for repair. Although repaired, AIT found that these meters were still not functioning properly. This matter was being attended to. Other problems encountered include difficulty in locating stations and lack of suitable personnel who were experienced in oceanographic field surveys.

14. The Indonesian delegation reported on project EAS 2.1 which consisted of (1) second survey and technical meeting; (2) second intercalibration programme; and (3) co-ordinating visits/travel, which all would be carried out during the months of July/August 1986. Duration of the survey would be seven days including a one-day meeting and discussion. Participants will be based in either P. Sambu or P. Batam. Additional budget for the completion of the project for 1986 will be US \$30,500.

15. The project EAS 2.2 "Co-operative Research on Oil and Oil Dispersant Toxicity" involved the screening of a number of oil dispersants for their toxicity to marine life, particularly fish, so as to identify dispersants with a lower level of toxicity. Participating countries in the project were Indonesia, Malaysia (lead country), the Philippines and Thailand. The project began with a regional workshop in Penang, Malaysia, in March 1984 to introduce a standard methodology to participating laboratories. The results of toxicity testing were discussed at a review meeting in Sydney, Australia, in November 1985. This meeting, having noted the difficulties faced by some of the laboratories decided to extend toxicity testing till December 1986 with a revised protocol. It is expected that the project will be completed in early 1987, with a final meeting, to be held in Jakarta, Indonesia, to evaluate all results of toxicity screening. Following this meeting it is also expected that a seminar will be held in Jakarta to disseminate the results of the project, both to the public and private sectors.

16. Non-oil pollutants intercalibration exercises on the analyses of trace metals were undertaken in sub project EAS 3.2 on the "Assessment of Concentration Levels and Trends of Non-Oil Pollutants" using reference materials from the IAEA Laboratory in Monaco. More than half of the participating laboratories in the region had submitted their results to the reference laboratory in the Philippines. Analysis of samples for organochlorines will be undertaken after the workshop on organochlorines is held in Port Moresby. This workshop is a joint undertaking of SPREP, COBSEA, UNEP and IOC/UNESCO that will take place on June 23 to July 4, 1986. The sub project "Study on the Effects of Non-Oil Pollutants on Selected Marine Organisms" has been initiated by the Philippines and it is expected that other countries will be involved.

17. Activities in the project EAS 4 "Study of Coral Resources and the Effects of Pollutants and Other Destructive Factors on Coral and Mangrove Communities and Related Fisheries" have been undertaken by four countries. Phase I of the project is essentially complete and the final report will be finalized as soon as all country reports are submitted to the co-ordinating institution. Activities in Phase II have just commenced and will focus more on the study of the effects of destructive factors on corals and related fisheries. Two workshops are to be held in the Philippines in May, to be participated in by countries from several regional seas areas. Participants have been invited from the South Pacific, South Asia, East Africa, the Red Sea and Gulf of Aden, as well as the Kuwait Action Plan region in addition to East Asia. UNESCO is co-sponsoring the workshops on Coral Taxonomy and on Methods of Visual Census of Coral Reef Fishes.

18. On project EAS 5.2 "Implementation of a Technical and Scientific Support Programme for Oil Spill Contingency Planning", the Indonesian delegation advised that a workshop is scheduled to be held in late 1986 to provide technical and scientific information and guidelines needed for oil spill response phasing, clean up and environmental impact assessment. After the workshop, participating countries would proceed with activities on the development of a framework and guidelines for the establishment of specialist teams for carrying out impact assessment studies. Indonesia as lead country will prepare a report based on inputs from participating countries. A consultant is required to speed up the implementation of the project. An additional budget of US \$50,000 is required in 1986/87 for the completion of the project.

19. For project EAS 6.1 "Waste Discharges into Coastal Waters" the Thai delegation advised that the project was approved during the last COBSEA meeting. However, it was not implemented due to lack of funds. In connection with this project, the Thai delegation tabled a proposal for part II of EAS 6.1 for discussion. They requested that this project be included in the workplan for 1986/87.

20. Under the project EAS 6.2, a three-day Workshop on Cleaning Up of Urban Rivers was held in Singapore from 14 to 16 January 1986. It was attended by delegates from all COBSEA member countries, including Brunei Darussalam. Two consultants and a UNEP expert also took part in the workshop which enabled the delegates to benefit from the exchange of expertise and experience in the cleaning up of urban rivers. The workshop recommended measures to abate urban

river pollution. A sum of US \$10,434.22 was spent in connection with the workshop. The low expenditure was due to savings from allowances and airfares as well as lower cost of services. The meeting was informed that Thailand had implemented many of the measures in the cleaning up of its urban rivers.

21. Under the project EAS 7 the Indonesian delegation reported that a consultative meeting on Information and Data Exchange on the Seas of East Asia was held in Bali, Indonesia, on 17-19 March 1986. The meeting was attended by participants from Malaysia, the Philippines, Singapore, Thailand and Indonesia. Observers from the ASEAN Secretariat, UNESCO and relevant Indonesian institutions were also present. Besides recommending the compilation of a joint list of publications of the reports on the marine environment and a directory of marine scientists in the East Asian Seas region, the meeting recommended the development of a regional information and data exchange network in the long-term. The meeting also welcomed Mr. Harger's suggestion to convene a workshop/meeting on the development of marine environmental data bases in late 1986. The additional budget for the project in 1986/87 is US \$54,000.

Agenda Item 6: Interventions of international organizations and funding institutions

22. The meeting took note of the information submitted by IMO (UNEP/IG.65/INF.3) about the discussions between IMO and the relevant authorities of the Indonesian Government on the project dealing with contingency planning. IMO's readiness to provide advice on possible consultant services, to review the reports of consultants, to participate actively in any meeting convened to discuss contingency planning and to provide the services of the IMO Marine Pollution Adviser for Asia and Pacific, was also noted with appreciation.

23. The assistance offered by the International Laboratory of Marine Radioactivity of IAEA (UNEP/IG.65/INF.4) in the field of (a) implementation of pollution prevention by radioactive substances; (b) training in techniques related to marine pollution studies; (c) quality control of data; (d) environmental impact assessment; and (e) reference methods for marine pollution studies was noted with appreciation.

24. The observer from UNESCO reported on the two coral reef related research training courses to be operated by UNESCO-COMAR and UNEP jointly in the Philippines, May 1986, on coral taxonomy and reef fish population assessment which represent the third and fourth co-operative programmes to be instituted by COBSEA and UNESCO in the region, the earlier two being held at the Phuket Marine Biological Center (UNEP/IG.65/INF.5).

25. The UNESCO Division of Marine Sciences has started to develop a very flexible procedure for constructing and maintaining coastal resource data bases using microcomputers, DBASE-III and related programmes, with such material to be available for circulation on floppy disks mainly in IBM format.

26. In this connection the recently held "UNESCO-COMAR Workshop with Advanced Training on Human Induced Damage to Coral Reefs", Jepara and Pulau Seribu, Indonesia 10-22 May 1985 has produced a preliminary data base consisting of some 15,000 records which is presently available on floppy disks in IBM as well as other formats, for general use. The material can be supplied on request simply by sending in a blank diskette to UNESCO Jakarta and it includes an extensive text file covering the format and possible uses of the data.

27. UNESCO is pushing ahead with development of coastal resource data bases using microcomputers and would be interested in discussing further co-operative efforts in this field should COBSEA feel that this area is sufficiently important to warrant increased attention.

28. The observer from the International Development Research Centre (IDRC) briefed the meeting on the activities of the organization (UNEP/IG.65/INF.6). In the discharge of its obligations the Centre functions broadly through five principal divisions, each representing a principal discipline within which fall a great many of the development issues of third world countries. These are:

- Agriculture, Food and Nutrition Sciences;
- Social Sciences;
- Information Sciences;
- Health Sciences; and
- Energy

29. Apart from those principal divisions, IDRC is concerned with dissemination, training and professional upgrading, and the Co-operative Programmes Division promotes collaboration between scientific research groups in developing countries and their counterparts in Canada with a view to transferring of research results from Canada to the third world countries.

30. Implicit was that IDRC funding rests entirely on third world country needs and according to priorities outlined by these countries. The Centre responds to the needs of these countries and provides support to the resolution of problems within them by the indigenous scientific communities. In doing so, however, the Centre does recognize the usefulness of international and regional networks through which developing country scientists can learn from each other and share common experiences.

31. The observer from IOC reported that IOC has been very much involved in the East Asian Seas in activities related to the marine environment, particularly in the field of marine pollution (UNEP/IG.65/INF.7). Some of the actions being implemented by IOC in this region include:

- workshop on analysis of organochlorines, to be held in Papua New Guinea in June 1986;
- intercalibration exercise on trace metals analysis;
- circulation of a questionnaire on national/international "Musselwatch" type of activities in the region, to form a basis for building a regional network of musselwatch laboratories; and
- workshop on river inputs of contaminants, to be held in Bangkok in April/May 1986.

32. The observer from IOC expressed IOC's interest in co-operation and technical assistance to COBSEA for future work in UNEP's East Asian Seas Action Plan, in the following areas, within its sphere of competence and resources:

- follow-up activities on river input studies, as may be extended to other parts of the region;
- formulation of a proposal for a network of laboratories for musselwatch;
- biological effects of pollutants on mangrove and coral ecosystems;
- physical oceanography studies in relation to coastal zone pollution; and
- monitoring of petroleum hydrocarbon contamination in coastal seas through its ongoing MARPOLMON programme.

33. The observer from the International Union for Conservation of Nature and Natural Resources (IUCN) conveyed the greetings of the Union's Director General, Mr. Kenton R. Miller, to the meeting. He explained that many people had the impression that IUCN was primarily involved in establishing national parks and protected areas. He indicated that in fact this activity represented only a fraction of IUCN activities. IUCN was involved in the development of the World Conservation Strategy and since its adoption has been actively engaged in many development/conservation related projects. With reference to the East Asian Seas Action Plan this included projects for coastal zone management as well as establishment of marine protected areas.

34. The observer from IUCN would make efforts to contribute to the EAS project covering coral reefs and mangroves by developing a project to study the ecology and socio-economics of the swamp forest/mangrove/coastal areas of the region, possibly in collaboration with UNESCO and the Marine Science Institute of the Philippines. He also indicated that IUCN was hoping to initiate a multi-disciplinary project for the management of the Pulau Seribu area off Jakarta in co-operation with the Indonesian Government; if the project is funded it could serve as a place to train personnel from the East Asian Seas region in many methodologies concerning marine and coastal area management. Finally he indicated that IUCN would be willing to support the proposal for a review of the status of marine mammals in the region as contained in the report of the Executive Director of UNEP.

35. The observer from the Economic and Social Commission for Asian and the Pacific (ESCAP) briefed the meeting on the environment-related activities of ESCAP.

Agenda Item 7: Workplan and budget for 1986-1987 including new proposals

36. After carefully analysing the proposed extension of ongoing projects, the proposed new projects and the proposals of the Executive Director, the meeting decided on the following workplan and budget.

A. Activities to be supported from the Trust Fund (July 1986 - June 1987)

37. The meeting deliberated on the prioritization of the projects for 1986-1987. It was decided that ongoing project extension should be given first priority, previously approved but unfunded proposals second priority, and new project proposals third priority. Delegates presented the proposed budgets for all three categories of projects as indicated below:

Category I - On-going project extensions

		Full budget	Initial budget
1.	EAS 1 Oceanography	76,200	66,200
2.	EAS 2.1 Survey of Sources and Oil Pollution Monitoring	30,500	15,250
3.	EAS 2.2 Co-operative Research on Oil and Oil Dispersant Toxicity in the EAS Region	40,735	5,735
4.	EAS 3 Assessment of Non-oil Pollutants	22,648	15,000
5.	EAS 4 Study of Coral Resources and the Effects of Pollutants and other Destructive Factors on Coral Communities and related Fisheries in the East Asian Seas Region	25,250	12,500
6.	EAS 5.2 Support Programme for Contingency Planning	50,000	46,000
7.	(EAS 6.2 Cleaning Up of Urban Rivers)	(12,565)	(12,565)
8.	EAS 7 Information and Data Exchange	54,000	27,000
	TOTAL	US \$ 286,768	US \$ 175,120

Category II - Approved projects

		Budget
1.	EAS 6.1 Waste Discharges into Coastal Waters	41,000
2.	EAS 3.4 Land-based Sources of Pollution	45,360
3.	EAS 4 Mangrove Component	40,000
	TOTAL	US \$ 126,360

Category III - New projects/proposals

	Budget
1. EAS 6.1 Waste Discharge into Coastal Waters (Part II/Workshop)	36,000
2. EAS 8 Red Tides and Shellfish Toxicity	70,000
3. EAS 9 Marine Mammals	30,000
4. EAS 5.4 Research Advisory Service on Oil Pollution	80,000
5. EAS 5.1 Training Programme for Oil Pollution Control	80,000
5. EAS 5.3 Operational Pollution Control from Ships	80,000
TOTAL	US \$ 376,000

38. The total budget requirement for category I was US \$286,768. However, since only US \$175,799 is immediately available in the Trust Fund, it was decided to allocate initially a reduced budget for each of the projects. These reduced budgets will be supplemented when funds are available. The workplans for these extensions were approved by the meeting (annex IV). The relevant project co-ordinators were requested to submit to UNEP as soon as possible the necessary additional classifications on the workplans and budget, without which no project revision could take place.

39. Three proposals previously approved by COBSEA IV were placed in category II and listed in order of priority. The approved workplans and budgets are given in annex V.

40. Category III projects include new proposals and previously identified new projects. These were also prioritized within the category and the workplans and detailed budgets of the first three are included in annex VI. It was felt that some support can be obtained from third party sources. If the marine mammals project were to be funded by a third party, IUCN would if requested prepare the project document with the lead country, Indonesia. If UNEP would provide US \$15,000 IUCN would provide one man-month of consultancy (US \$6,000) towards the marine mammals proposal.

41. The meeting requested UNEP to explore the possibility of obtaining resources for category II and III projects from funding agencies as appropriate.

B. Activities to be supported from the Environment Fund

42. Secretariat support to the Action Plan (January 1986 - December 1987): US \$40,000.

43. In-depth evaluation of the results achieved through the individual projects carried out in the framework of the Action Plan, including the results of projects carried out during the preparatory phase of the Action Plan, in order to analyse their effectiveness and contribution to the principal objective of the Action Plan, and the preparation of a regional overview of the state of the marine environment for the area covered by the Action Plan (July 1986 - June 1987): US \$25,000.

44. A meeting of scientists and scientific institutions which participate or which may participate in the Action Plan in order to review the drafts of the in-depth evaluation and of the regional overview on the state of the marine environment (early 1987): US \$15,000.

45. Support to the establishment of a central or several specialised data banks in order to process (collect, validate, analyse and disseminate) data generated by EAS projects (July 1986 - December 1987): US \$30,000. The funds will be released on the basis of acceptable proposals to be developed in consultation between East Asian Seas focal points, UNESCO, IUCN and UNEP(ROAP). UNEP(ROAP) is expected to co-ordinate the development of the proposals.

46. Support to a quarterly newsletter bringing news on the progress of the Action Plan (July 1986 - December 1987): US \$10,000. Half will be released to Malaysia in 1986 and the other half will be released to the next Interim Co-ordinator.

47. Support to a regional project on marine mammals (July 1986 - December 1987): US \$15,000 subject to the availability of counterpart funding.

Agenda Item 8: Status of the EAS Trust Fund

48. Mr. S. Keckes, referring to document UNEP/IG.65/4, indicated that the 1982 and 1983 pledges to the Trust Fund have been paid fully (US \$172,000). The pledges for 1984 and 1985 (US \$181,600) have not been paid fully yet, leaving an outstanding balance of US \$38,000.

49. The total income of the Trust Fund since its establishment in 1981, including the accrued interest amounted to US \$344,135. The present level of Trust Fund expenditures and commitments amounted to US \$168,336, leaving US \$175,799 as available cash for extension of ongoing projects or for new projects.

50. The meeting decided that the pledges for 1986 should remain the same as those agreed for 1985. The pledges for 1987 will be decided at the next meeting of COBSEA.

Agenda Item 9: Other business

51. The meeting referring to the institutional and financial arrangements reported in UNEP/IG.44/11 unanimously endorsed the extension of the present East Asian Seas Programme which ended in December 1985 for another two years till December 1987.

52. The workplans and budgets as in annexes IV to VI were approved by the meeting. Details would be submitted to UNEP by the lead countries, taking into account the financial support by UNEP listed above.*

Agenda Item 10: Adoption of the report

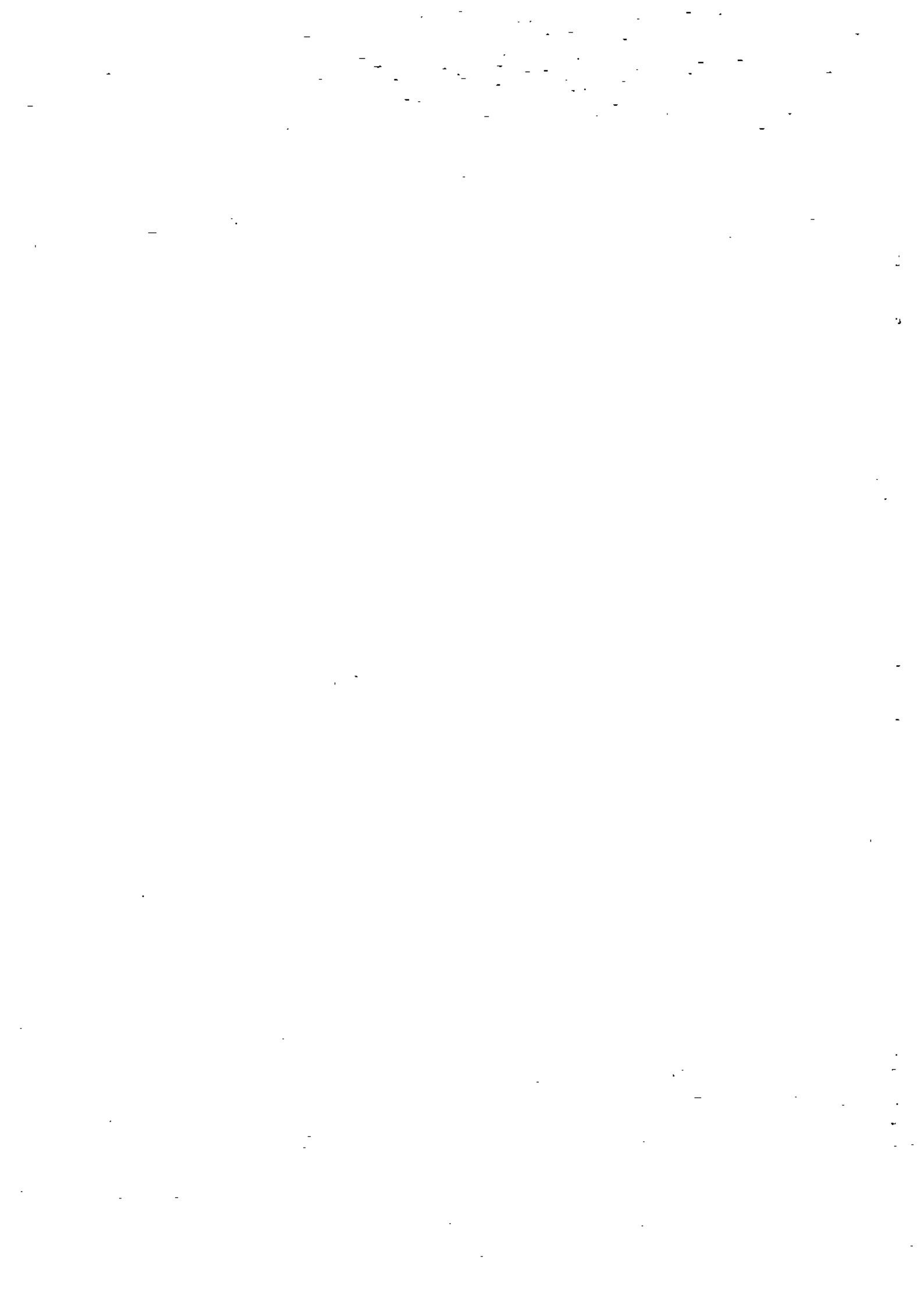
53. After reviewing its content and annexes, the meeting unanimously adopted this report.

Agenda Item 11: Closure of the meeting

54. The Malaysian delegation expressed thanks to the Government of Singapore on behalf of the meeting for their hosting of the meeting and for providing excellent facilities. The UNEP representative reiterated these thoughts and expressed UNEP intent to vigorously support the continued implementation of the East Asian Seas Action Plan.

55. The meeting was formally closed by the Chairman at 13.30 hours on 26 April 1986.

* Those details received by UNEP have been incorporated into the appropriate annexes.



Annex I -

List of participants

BRUNEI DARUSSALAM

Mr. Haji Ibrahim Haji Mat YASSIN
Commissioner of Town and Country Planning
Department of Town and Country Planning
Ministry of Development
Bandar Seri Begawan

Mr. Morni OTHMAN
Deputy Director of Agriculture
Department of Agriculture
Ministry of Development
Bandar Seri Begawan

INDONESIA

Mr. Herman HAERUMAN
Assistant Minister
Ministry of State for Population and the
Environment
Jalan Merdeka Barat 15
Jakarta

Mr. E. J. S. LAHAY
Head, Sub Directorate for Marine Pollution
Directorate General of Sea Communications
Jalan Medan Merdeka Timur 5
Jakarta Pusat

Tel: 352398/340788

Mr. Henk UKTOLSEYA
Co-ordinator
Marine and Coastal Affairs
Ministry of State for Population
and the Environment
Jalan Merdeka Barat 15
Jakarta

MALAYSIA

Mr. A. MAHESWARAN
Director-General
Department of Environment
Ministry of Science Technology and the
Environment
13th Floor, Wisma Sime
Darby, Jalan Raja Laut,
50662 Kuala Lumpur

Tel : 03-2936886/2938955
Telex:MA 28154 MOSTEC

Mr. GOH Kiam Seng
Director, (Environmental Planning
and Development)
Department of Environment
Ministry of Science, Technology
and the Environment
13th Floor, Wisma Sime
Darby, Jalan Raja Laut,
50662 Kuala Lumpur

Tel : 03-2936886/2938955
Telex:MA 28154 MOSTEC

Mr. FONG Chit Ying
Principal Assistant Secretary (Conservation)
Ministry of Science Technology
and the Environment
14th Floor, Wisma Sime
Darby, Jalan Raja Laut
50662 Kuala Lumpur

PHILIPPINES

Miss Petronila GARCIA
Third Secretary and Vice Consul
Philippines Embassy in Singapore

SINGAPORE

Mr. Richard LAU
Director (Finance and Administration)
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel: 473 5111
Telex:MOE RS34345
Cable:MINENVIRON SINGAPORE

Mrs. KUAN Kwee Jee
Administrative Officer
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel, 473 5111
Telex:MOE RS34345
Cable:MINENVIRON SINGAPORE

Mr. CHIANG Kok Meng
Chief Engineer (Pollution Control)
Sewerage Department
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel, 473 5111.
Telex:MOE RS34345
Cable:MINENVIRON- SINGAPORE

Mr. KHOO Chin Hean
Senior Engineer, (Anti-Pollution Unit)
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel: 473 5111
Telex: MOE RS34345
Cable: MINENVIRON SINGAPORE

Mr. LAI Hon Kuan
Administrative Officer
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel: 473 5111
Telex: MOE RS34345
Cable: MINENVIRON SINGAPORE

Mrs. ANG-TAN Seow Kiak
Senior Engineer, Sewerage Department
Ministry of the Environment
Princess House
Alexandra Road
Singapore 0315

Tel: 473 5111
Telex: MOE RS34345
Cable: MINENVIRON SINGAPORE

Mr. LIM Kian Wei
Administrative Officer
Port of Singapore Authority

THAILAND

Mr. Pravit RUYABHORN
Secretary-General
National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

Mr. Pakit KIRAVANICH
Deputy Secretary-General
National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

Mr. Sunthad SOMCHEVITA
Director of Environmental Policy
and Planning Division
Office of the National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

Mr. Saksit TRIDECH
Chief, Air and Noise Section,
Office of the National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

Miss Krisana CHOYUPON
Environmental Official
Office of the National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

Miss Jarupa U-POOL
Administrative Official
Office of the National Environment Board
Rama VI Rd.
Bangkok 10400

Tel: 279 0129
Telex: 20838 MINSTEN TH
Cable: NALENBO, BANGKOK

RESOURCE PERSONS

UNITED NATIONS ENVIRONMENT
PROGRAMME

Mr. Stjepan Keckes
Director
Oceans and Coastal Areas Programme Activity
Centre
UNEP
P.O. Box 30552
Nairobi
Kenya

Tel: 333930
Telex: 22068 UNEP-KE
Cable: UNITERRA NAIROBI

Mr. Nay HTUN
Director and Regional Representative
for Asia and the Pacific

UNEP
Regional Office for Asia
and the Pacific
United Nations Building
Rajadamnern Avenue
Bangkok 10200
Thailand

Tel: 2829161-200/2829381-389
Telex: TH 82392 BANGKOK/TH 82315 BANGKOK
Cable: UNITERRA BANGKOK

Mr. E.D. GOMEZ
UNEP Consultant
Marine Science Institute
University of the Philippines
Diliman
Quezon City
Philippines

Tel: 989742 Direct
976061 Ext. 402
Cable: UPMARSCI MANILA

OBSERVERS

ECONOMIC AND SOCIAL COMMISSION
FOR ASIA AND THE PACIFIC

Mr. Brij KISHORE
Environment Officer
Environmental Co-ordinating Unit
ESCAP
The United Nations Building
Rajadamnern Avenue
Bangkok 10200
Thailand

Tel: 2829161-200
2829381-389
Telex: 82302 ESCAP TH/82315 ESCAP TH
Cable: ESCAP BANGKOK

UNITED NATIONS DEVELOPMENT
PROGRAMME

Mr. Bjorn CARLSSON
Deputy Regional Representative
for Malaysia, Singapore and Brunei
UNDP
P.O. Box 12544
Kuala Lumpur
Malaysia

Tel: (03) 94255/942717/942905/942687/
942840/942369
Telex: MA 30270
Cable: UNDEVPRO KUALA LUMPUR (MALAYSIA)

UNITED NATIONS EDUCATIONAL
SCIENTIFIC AND CULTURAL
ORGANIZATION

Mr. J. R. E. HARGER
Programme Specialist in
Marine Science
UNESCO/ROSTSEA
Jln M. H. Thamrin 14
Jakarta
Indonesia

INTERNATIONAL OCEANOGRAPHIC
COMMISSION

Mr. Alexander A. JOTHY
IOC
Fisheries Research Institute
Penang
Malaysia

ASEAN COUNCIL ON PETROLEUM

Mr. Ismail AHMAD
ASCOPE Environment & Safety
Programme Co-ordinator

INTERNATIONAL DEVELOPMENT
RESEARCH CENTRE

Mr. P. C. MUNANSINGE
Deputy Director
IDRC
7th Storey, RELC Building
30 Orange Grove Road
Singapore 1025

INTERNATIONAL UNION FOR THE
CONSERVATION OF NATURE
AND NATURAL RESOURCES

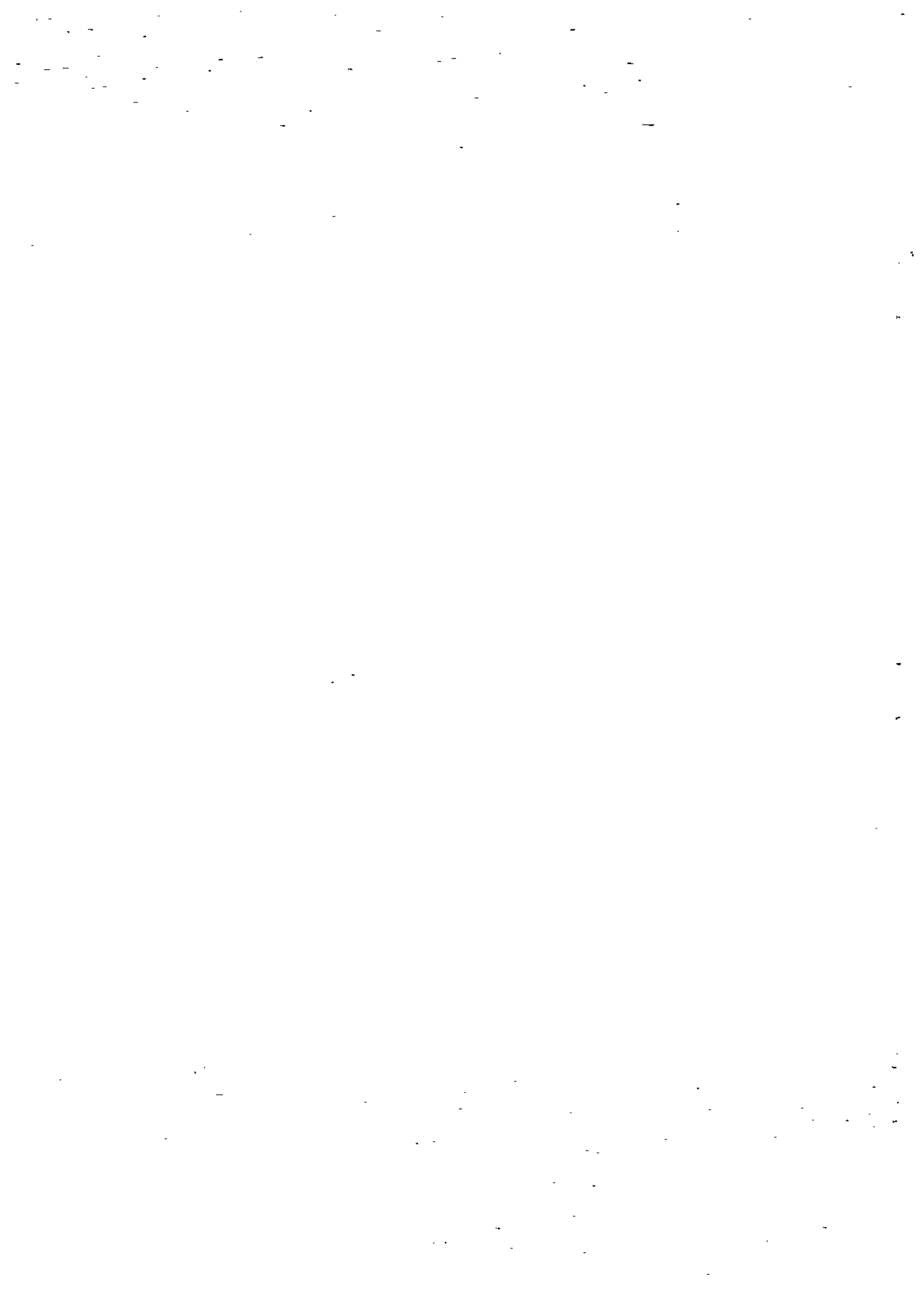
Mr. Danny ELDER
Marine Programme Officer
IUCN
CH-1196 Gland
Switzerland

Tel: (022) 64 71 81
Telex: 22618 IUCN CH
Cable: IUCNATURE GLAND

Annex II

Agenda

1. Opening of the meeting.
2. Organization of the meeting.
 - (a) Designation of officers
 - (b) Adoption of the Agenda
3. Report of the Interim Co-ordinator of COBSEA.
4. Report of the Executive Director of UNEP.
5. Progress reports on ongoing EAS Action Plan projects.
6. Interventions of international organizations and funding institutions.
7. Workplan and budget for 1986/87 including new proposals.
8. Status of the EAS Trust Fund.
9. Other business.
10. Adoption of the report.
11. Closure of the meeting.



Annex III

List of documents

Working documents

UNEP/IG.65/1	Provisional agenda.
UNEP/IG.65/2	Annotated provisional agenda.
UNEP/IG.65/3	Report of the Interim Co-ordinator.
UNEP/IG.65/4	Report of the Executive Director.
UNEP/IG.65/5	Progress report on project EAS 1: Oceanography.
UNEP/IG.65/5/Add.1	Project on oceanography project 1: Study of the maritime meteorological phenomena and oceanographic features of the East Asian Seas region (EAS 1.1 & 1.2). (Revised Workplan, 1986-1989).
UNEP/IG.65/6	Progress report on project EAS 2.1; Survey of sources and oil pollution monitoring and project EAS 7; Development of national co-ordinating mechanisms for the management and establishment of a regional data exchange system.
UNEP/IG.65/7	Progress report on project EAS 2.2: Co-operative research on oil and oil dispersant toxicity.
UNEP/IG.65/8	Progress report on project EAS 3.2: Assessment of concentration levels and trends of non-oil pollutants and their effects on the marine environment in the East Asian Seas region.
UNEP/IG.65/8/Add. 1	Assessment of concentration levels and trends of non-oil pollutants and their effects on the marine environment in the East Asian Seas Region - project plans and budgetary requirements 1986 - 1987.
UNEP/IG.65/9	Progress report on project EAS 4: Study of coral resources and the effects of pollutants and other destructive factors on coral and mangrove communities and related fisheries in the East Asian Seas region.

UNEP/IG.65/9/Add.- 1

Workplan and budget 1986-1987. Study of coral resources and the effects of pollutants and other destructive factors on coral and mangrove communities and related fisheries in the East Asian Seas region.

UNEP/IG.65/10

Progress report on project EAS- 5.2: Implementation of a technical and scientific support programme for oil spill contingency planning.

UNEP/IG.65/11

Report on project EAS 6.2: Co-operative study on cleaning up of urban rivers.

UNEP/IG.65/12

Report of the Fifth Meeting of the Co-ordinating Body on the Seas of East Asia.

Information documents

UNEP/IG.65/INF.1

Provisional list of documents.

UNEP/IG.65/INF.2

List of participants.

UNEP/IG.65/INF.3

Message from IMO (Morozov).

UNEP/IG.65/INF.4

Communication from IAEA Monaco (Walton).

UNEP/IG.65/INF.5

UNESCO marine science activities in southeast Asia and the Pacific.

UNEP/IG.65/INF.6

What is IDRC?

UNEP/IG.65/INF.7

IOC Brief.

Reference documents

FAO/UNEP

Marine Mammals: Global plan of action UNEP Regional Seas Reports and Studies No. 55. UNEP 1985.

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Marine Mammals: Global plan of action. UNEP Regional Seas Reports and Studies No. 55 Annex. UNEP 1985.

IUCN/UNEP

Management and conservation of renewable marine resources in the Indian Ocean region; Overview. UNEP Regional Seas Reports and Studies No. 60. UNEP 1985.

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Management and conservation of renewable marine resources in the East Asian Seas region. UNEP Regional Seas Reports and Studies No. 65. UNEP 1985.

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Ecological interactions between tropical coastal ecosystems. UNEP Regional Seas Reports and Studies No. 73. UNEP 1985.

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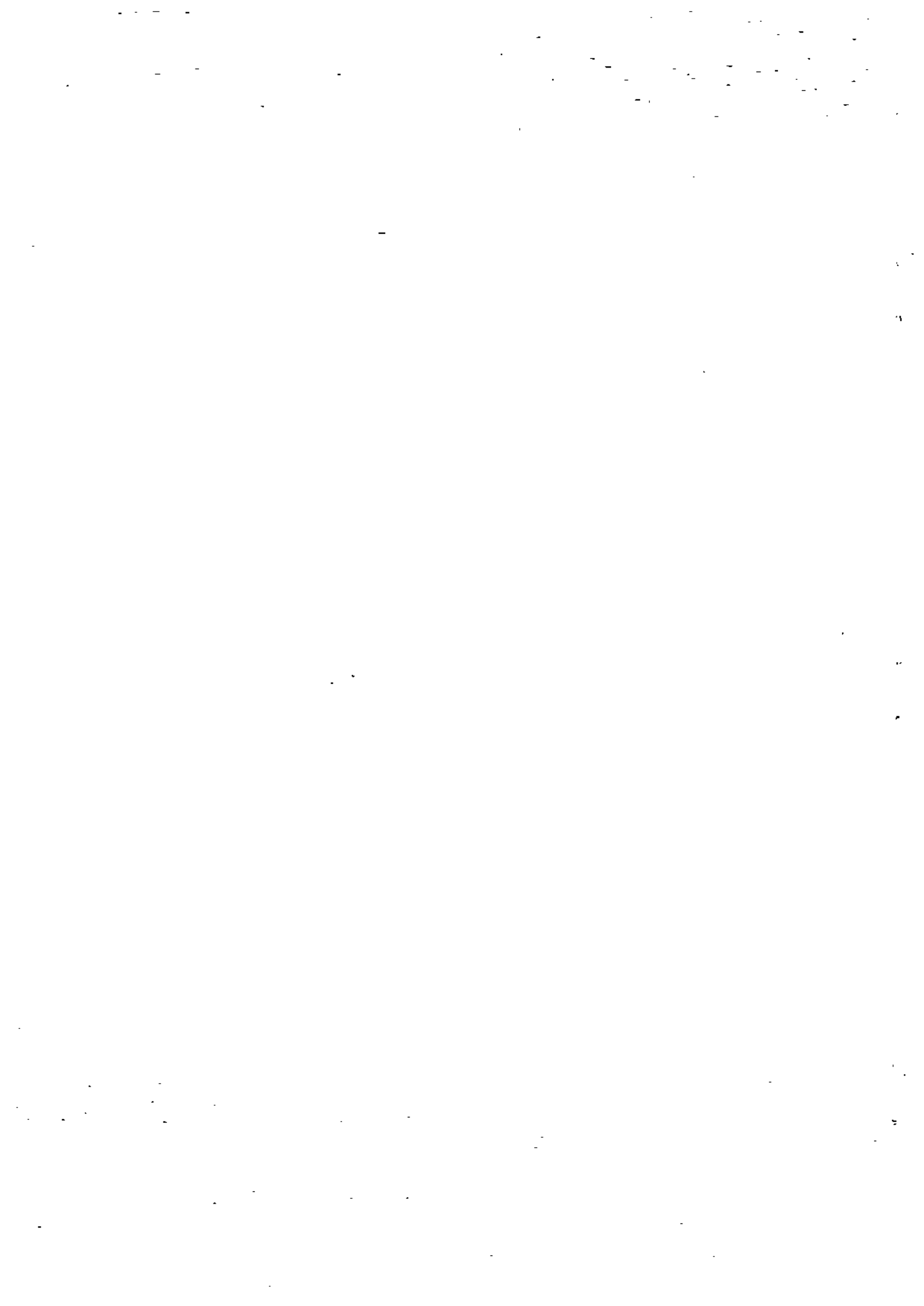
Report of the Fourth Meeting of the Co-ordinating Body on the Seas of East Asia (Manila, 22-23 April 1985).

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Co-operative programmes sponsored by UNEP for the protection of the marine and coastal environment in the wider Indian Ocean region. UNEP Regional Seas Reports and Studies No. 58. UNEP 1985.

UNEP

Environment and resources in the Pacific. UNEP Regional Seas Reports and Studies No. 69. UNEP 1985.



Annex IV

Category I - On-going project extensions
Workplan and timetable (July 1986 - June 1987)

EAS 1 (FP/ES/5102-82-17) - Study of the Maritime Meteorological Phenomena and Oceanographic Features of the East Asian Seas Region

Workplan

Activities	Timetable
Preparatory phase and review of pertinent information (including development of mathematical model)	May - August 1986
Acquisition of technology and equipment	May - October 1986
Development of mathematical model	May - October 1986
Field data survey and collection	August 1986 - August 1987
Data analysis and management	September 1986 - September 1987
Preparation of report	June 1987

Full budget

Component	Cost (US \$)
10 Project Personnel Component	
1100 Project personnel	28,880
1600 Travel	2,000
40 Equipment Component	
4100 Expendable equipment	5,096
4200 Non-expendable equipment	28,500
50 Miscellaneous Component	
5100 Operation and maintenance of equipment	10,924
5200 Reporting cost	300
5300 Sundry	500
	<hr/>
GRAND TOTAL	76,200
	<hr/>

Reduced workplan

Activities

Timetable

(Workplan above will be followed but at reduced cost)

Initial budget

	Component	Cost US \$
10	Project Personnel Component	
	1100 Project personnel	28,880
	1600 Travel	2,000
40	Equipment Component	
	4100 Expendable equipment	5,096
	4200 Non-expendable equipment	18,500
50	Miscellaneous Component	
	5100 Operation and maintenance of equipment	10,924
	5200 Reporting cost	300
	5300 Sundry	500
	GRAND TOTAL	<u>66,200</u>

EAS 2.1 and EAS 7 - (FP/ES/5102-82-18) - Survey and Monitoring of Oil Pollution and Development of National Co-ordinating Mechanisms for the Management and Establishment of a Regional Data Exchange System

Workplan

Activities	Timetable
<u>Part I</u>	
Joint survey and seminar II	July/August 1986
Intercalibration exercises II	February 1987
Evaluation and reporting	December 1986
Progress report	April 1987
Co-ordinating visit/training	July/August 1986
Report preparation	July 1987
<u>Part II</u>	
Regional exercise meeting	October 1986
Report preparation	February 1987

Full budget

Component	Cost US \$
10 Project Personnel Component	
1600 Travel on official business	7,500 *
Travel on official business	10,000 **
1999 Component Total	17,500
30 Training Component	
3202 Technical meeting II (12 persons in Jakarta and Batam for 10 days)	15,000 *
Joint survey and seminar II	5,500 **
3298 Exercise on computer data base	18,000 **
3999 Component Total	38,500
50 Miscellaneous Component	
5100 Operation and maintenance of equipment	20,000 **
5200 Reporting cost	1,500 *
Reporting cost	7,000 **
5999 Component Total	28,500
GRAND TOTAL	84,500

* EAS 2.1
** EAS 7

Reduced workplan

Activities	Timetable
<u>Part I</u>	
Joint survey and seminar II	July/August 1986
Evaluation and reporting	December 1986
Progress report	September 1986
Coordinating visit/training	July/August 1986
<u>Part II</u>	
Regional exercise meeting	October 1986
Report preparation	February 1987

Initial budget

Component	Cost US \$
10 Project Personnel Component	
1600 Travel	10,000 **
1999 Component Total	<u>10,000</u>
30 Training Component	
3202 Technical meeting II (12 persons in Jakarta and Batam for 10 days)	14,250 *
3298 Exercise on computer database	18,000 **
3999 Component Total	<u>33,000</u>
GRAND TOTAL	<u>42,250</u>

* EAS 2.1

** EAS 7

EAS 2.2 (FP/ES/5102-82-15) - Co-operative Research on Oil and Oil-dispersant
Toxicity in the East Asian Seas Region

Workplan

Activities	Timetable
Toxicity Testing by participating laboratories (Malaysia, Indonesia, Thailand, Philippines)	July 1986 - February 1987
Final Meeting in Jakarta to discuss and evaluate test results	March 1987
Seminar in Kuala Lumpur to have dialogue with the industry and private sector on toxicity ratings determined	April - May 1987
Final report preparation	May - June 1987

Full budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	2,000
1600 Travel on business	1,400
30 Training Component	
3201 Final meeting in Jakarta for 12 persons for five days	15,000
3202 Seminar in Kuala Lumpur for 100 persons for one day	20,000
40 Equipment Component	
4100 Expendables (chemicals, test animals, etc)	4,136
4200 Non-expendables (salinometer, dissolved oxygen meter, etc)	4,265
50 Miscellaneous Component	
5200 Reporting cost	3,500
5300 Sundries (transportation charges)	2,000
TOTAL	<u>52,301</u>
Less balance	<u>11,566</u>
GRAND TOTAL	<u>40,735</u>

Reduced workplan

Activities	Timetable
Toxicity testing by participating February 1987 laboratories (Malaysia, Indonesia, Philippines, and Thailand)	July 1986 -
Report preparation	May - June 1987

Initial budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	2,000
1600 Travel on business	1,400
40 Equipment Component	
4100 Expendables (chemicals, test animals, etc.)	4,136
4200 Non-expendables (salinometer, D.O. meter, etc.)	4,265
50 Miscellaneous Component	
5200 Reporting cost	3,500
5300 Sundries (transportation charges by air cargo, etc.)	2,000
TOTAL	<u>17,301</u>
	<u>=====</u>
Less balance as at 1.4.86	<u>11,566</u>
GRAND TOTAL	5,735

EAS 3 (FP/ES/5102-82-19) - Assessment of the Concentration Levels and Trends of Non-Oil Pollutants and their Effects on the Marine Environment in the East Asian Seas Region

Workplan

Activities	Timetable
Organochlorine workshop	(June-) July 1986
Organochlorine intercalibration exercises	August - December 1986
Study on the effects of non-oil pollutants on selected marine organisms	July 1986 - June 1987
Assessment meeting	June 1987
Report preparation	June 1987

Full budget

Component	Cost US \$
10 Project Personnel Component 1100 Project personnel	2,670
30 Training Component 3201 Workshop 3202 Assessment meeting	10,630 6,348
50 Miscellaneous Component 5200 Reporting cost 5300 Sundries	1,000 2,000
GRAND TOTAL	<u>22,648</u>

Reduced workplan

Activities	Timetable
Organochlorine workshop	(June) July 1986
Organochlorine intercalibration exercises	August - December 1986
Study on the effects of non-oil pollutants on selected marine organism	July 1986 - June 1987
Report preparation	June 1987

Initial budget

	Component	Cost US \$
10	Project Personnel Component 1100 Project personnel	2,670
30	Training Component 3201 Workshop	10,630
50	Miscellaneous Component 5200 Reporting cost 5300 Sundries	1,000 <u>700</u>
	GRAND TOTAL	<u>15,000</u>

EAS 4 (FP/ES/5102-82-16) - Study of Coral Resources and the Effects of Pollutants and other Destructive Factors on Coral Communities and Related Fisheries in the East Asian Seas Region

Workplan

Activities	Timetable
Report preparation (Phase I)	July 1986
Long-term surveys of effects of pollutants and other destructive factors on coral ecosystems and analysis of data (Phase II)	July 1986 - June 1987
Biological study of specific coral reef flora and fauna	July 1986 - June 1987
Data analysis and report writing	April - June 1987

Full budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	6,500
1600 Travel	7,000
40 Equipment Component	
4100 Expendable equipment	4,000
4200 Non-expendable equipment	5,000
50 Miscellaneous Component	
5100 Operation and maintenance	2,500
5200 Reporting cost	250
GRAND TOTAL	<u>25,250</u>

Reduced workplan

Activities	Timetable
Report preparation (Phase I)	July 1986
Long-term surveys of effects of pollutants (Phase II)	July 1986 - June 1987
Data analysis and report writing	April - June 1987

Initial budget

	Component	Cost US \$
10	Project Personnel Component	
	1100 Project personnel	4,500
	1600 Travel	2,500
40	Equipment Component	
	4100 Expendable equipment	2,000
	4200 Non-expendable equipment	1,500
50	Miscellaneous Component	
	5100 Operation and maintenance	1,750
	5200 Reporting cost	250
	GRAND TOTAL	<u>12,500</u>

EAS 5.2 (FP/ES/5102-85-06) - Implementation of a Technical and Scientific Support Programme for Oil Spill Contingency Planning

Workplan

Activities	Timetable
Identification of susceptible areas and oil trajectory studies	February - October 1986
Workshop on technical and scientific information	November 1986
Oil spill environmental impact assessment	During actual oil spill
Development of framework and guidelines	November 1986 - January 1987
Report preparation	September 1986 - March/June 1987

Full budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	19,000
1300 Administrative support	8,500
	<u>27,500</u>
30 Training Component	
3200 Workshop for 22 persons for 10 days in Jakarta	20,000
50 Miscellaneous Component	
5100 Operation and maintenance of equipment	1,000
5200 Reporting cost	1,000
5300 Sundry	500
	<u>2,500</u>
GRAND TOTAL	<u>50,000</u>

Reduced workplan

Activities	Timetable
Identification of susceptible areas and oil trajectory studies	February - October 1986
Workshop on technical and scientific information	November 1986
Oil spill environmental impact assessment	During actual oil spill
Development of framework and guidelines	November 1986 - January 1987
Report preparation	September 1986 - March/June 1987

Initial budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	19,000
1300 Administrative support	<u>8,500</u>
	27,500
30 Training Component	
3200 Workshop for 20 persons for 10 days in Jakarta	18,500
	<u>46,000</u>
GRAND TOTAL	<u> </u>

Annex V

Category II - Approved projects
Workplan and timetable (July 1986 - June 1987)

EAS 6.1- Waste Discharges into Coastal Waters: Development and Application of Principles and Guidelines for the Discharge of Wastes into the Rayong Bay

Workplan

	Activities	Timetable
Phase I:	Collection and evaluation of existing data	July 1986 - February 1987
Phase II:	Field investigation	July 1986 - June 1987
Phase III:	Computerization (mathematical model development)	January 1987 - June 1987
Phase IV:	Preparation of report	May 1987 - August 1987

Budget

	Component	Cost US \$
10	Project Personnel Component 1100 Project personnel	13,500
40	Equipment Component 4000 Equipment	7,000
50	Miscellaneous Component 5100 Operation and maintenance of equipment	19,700
	5200 Reporting cost	500
	5300 Sundry	300
	GRAND TOTAL	<u>41,000</u>

EAS 3.4 - Land-based Sources of Pollution

Workplan

Activities	Timetable
Preparatory work	July - October 1986
Technical mission and other contacts	November - December 1986
Regional workshop	December 1986
National workshop	May - June 1987
Report preparation	June 1987

Budget

Component	Cost US \$
10 Project Personnel Component	
1200 Consultants	12,000
1600 Travel	5,200
30 Training Component	
3201 Regional workshop	22,800
3202 National workshop	5,000
GRAND TOTAL	<u>45,000</u>

EAS 4 - Mangrove Component

Workplan

Activities	Timetable
Compilation and literature review	July - August 1986
Site selection and preliminary survey	August - September 1986
Preparation of progress reports	September 1986 and March 1987
Resource inventory and assessment	October - December 1986
Identification of pollutants and other stresses on mangroves	October 1986 - March 1987
Biological study of specific mangrove flora and fauna	January - June 1987
Socio-economic survey	January - June 1987

Budget

Component	Cost US \$
10 Project Personnel Component	
1100 Project personnel	8,000
1202 Mangrove/marine scientist	2,500
1600 Travel	3,000
20 Sub-contract Component	
2101 Sub-contract 1	2,000
2102 Sub-contract 2	2,000
2103 Sub-contract 3	2,000
30 Training Component	
3201 Technical meeting	10,000
40 Equipment Component	
4100 Expendable equipment	5,000
4200 Non-expendable equipment	2,000
50 Miscellaneous Component	
5100 Operation and maintenance	3,000
5200 Reporting cost	500
GRAND TOTAL	40,000



Annex VI

Category III - New project proposals
Workplan and timetable (July 1986 - June 1987)

EAS 6.1 - Part II Workshop on Marine Pollution Control by Application of Waste Discharges into Coastal Waters

Workplan

The five-day workshop will be held at Pattaya, Thailand after finishing the Project EAS 6.1 Part I: Development and Application of Principles and Guidelines for the Discharge of Wastes into the Rayong Bay. The tentative date of this workshop is December 1987. Three participants from each ASEAN country will attend the workshop.

Budget

	Component	Cost US \$
10	Project Personnel Component	
	1200 Consultants	6,000
	1300 Administrative support	7,000
30	Training Component	
	3200 Group training, meeting (5 days, 3 participants from each country)	21,200
50	Miscellaneous Component	
	5200 Reporting cost	500
	5300 Sundry	1,300
	GRAND TOTAL	<u>36,000</u>

EAS 8 - Studies on Red Tides and Problems of Shellfish Toxicity

Workplan

Activities	Timetable
Project preparation	July 1986
Dynamics of plankton regime in affected coastal areas, particularly the red tide dinoflagellates and cysts	July 1986 - June 1987
Range of species of molluscs found in the inter-tidal zones of affected areas, and to identify those that are toxin bearing	July 1986 - June 1987
Laboratory culture techniques for dinoflagellate organisms concerned	July 1986 - June 1987
Chemistry and pharmacology of toxins involved, both from shellfish and the toxic dinoflagellates	July 1986 - June 1987
Workshop	October 1986
Technical meeting	March 1987
Report preparation	May - June 1987

Budget

	Component	Cost US \$
10	Project Personnel Component	
	Project personnel	2,000
	1200 Consultancy (1m/m)	6,000
	1600 Travel on official business	3,000
	1999 Component Total	<u>11,000</u>
30	Training Component	
	3201 Workshop (plankton dynamics, dinoflagellate culture, mouse bioassay tests) for 5 days (Penang) for 8 persons	10,000
	3202 Technical meeting for 12 persons for 5 days (Manila)	15,000
	3999 Component Total	<u>25,000</u>
40	Equipment Component	
	4100 Expendable equipment	5,000
	4200 Non-expendable equipment	20,000
	4999 Component Total	<u>25,000</u>
50	Miscellaneous Component	
	5100 Operation and maintenance	3,000
	5200 Reporting cost	3,000
	5300 Sundries	3,000
	5999 Component Total	<u>9,000</u>
	GRAND TOTAL	<u>70,000</u>

EAS 9 - Marine Mammals

Workplan

Activities	Timetable
Selection of consultant	July 1986
Consultant mission to EAS countries	July - September 1986
Preparation of draft report	September - October 1986
Submission of draft report to governments for comments	October 1986
Revision and printing of report	November - December 1986
Circulation and invitation to workshop on marine mammals	October 1986
Joint UNEP/IUCN Workshop on Status of Marine Mammals in EAS Region	December 1986
Preparation and circulation of report of meeting	January 1987

Proposed contribution from EAS Trust Fund
 and UNEP Environment Fund (1:1)

Component	Cost US \$
10 Project Personnel Component 1200 Personnel/consultants 3 m/m (includes attendance at Workshop)	20,000
30 Training Component 3200 Travel and DSA of national participants (6)	5,000
50 Miscellaneous Component 5200 Reporting costs 5300 Miscellaneous/sundry	4,000 1,000
GRAND TOTAL	30,000

Proposed IUCN contribution

10 Project Personnel Component 1200 Personnel/consultant 1 m/m	6,000
50 Miscellaneous Component 5101 Rental and maintenance 5104 Operation and maintenance of equipment	1,000 1,000
5300 Sundry	1,000
TOTAL	9,000

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