UNEP(OCA)/MED IG.1/Inf.3
10 August 1989

Original: ENGLISH

Sixth Ordinary Meeting of the Contracting Parties
to the Convention for the protection of the
Mediterranean Sea against pollution and its related
protocols

Athens, 3-6 October 1989

Report of the Executive Director on the implementation of the Mediterranean Action Plan in 1988/1989

UNEP
Athens, 1989

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A. Activities

1. Programme approval through decision-making meetings

1. The two Committees established by the Contracting Parties during their Fifth Ordinary Meeting to replace the regular meetings of the Focal Points for MED POL, ROCC, BLUE PLAN, PAP and SPA met in Athens in 1988. The Scientific and Technical Committee met between 23 and 27 May 1988 and its report has been distributed (document UNEP(OCA)/MED WG.1/12). The Socio-Economic Committee met between 27 and 29 September 1988 and its report has been distributed (document UNEP(OCA)/MED WG.2/7). The meetings reviewed the progress of the implementation of the workplans and their budgetary requirements for 1989. The meetings approved the workplans and budgets of the relevant components for 1989.

2. The Bureau of the Contracting Parties met in Athens on 18 February 1988 (UNEP/BUR/31) and on 31 October 1988 (UNEP/BUR/32). The Bureau reviewed the progress achieved since the Fifth Ordinary Meeting of the Contracting parties. Furthermore, the Bureau reviewed preparation of the meeting of the Expanded Bureau. The meeting was chaired by H.E. Mr. E. Kouloumbis, Minister for the Environment, Physical Planning and Public Works of Greece. Mr. W. Mansfield, Deputy Executive Director of UNEP attended the October meeting.

3. The Expanded Bureau was convened in Athens on 1-2 November 1988 (UNEP/BUR/33/6). The objectives of the meeting were to decide on the apportionment of the 1989 budget for MAP, to determine guidelines for the re-focusing of MAP and to consider how to facilitate the renewal of the Bureau. The meeting was chaired by H.E. Mr. E. Kouloumbis, Minister of the Environment, Physical Planning and Public Works of Greece. Mr. W. Mansfield, Deputy Executive Director of UNEP attended the meeting.

4. As concerns the issue of Refocusing of MAP, the Expanded Bureau (Athens, 1-2 November 1988) reviewed document UNEP/BUR/33/4 concerning "Preliminary ideas of the Executive Director on the Refocusing of the Mediterranean Action Plan on environmentally sound integrated planning and managment of the Mediterranean basin". All the participants made comments during the discussion of the document and the Bureau decided that further comments should be communicated to the Secretariat within two months supplementing those made during the debate. As at 1 July 1989, the Secretariat had received only six written comments (EEC, Israel, France, Libya, Malta and Yugoslavia). On the basis of these written comments and those made during the debate on this issue at the Expanded

Bureau, the Secretariat prepared a new version of the Executive Director's document (UNEP/BUR/34/4) for the consideration of the Bureau at its March 1989 meeting. The Bureau decided to request the secretariat to prepare a further revised version of document UNEP/BUR/34/4 in the light of comments made in the course of the debate and of written comments communicated by Governments with a view to the submission of the definitive text to the Contracting Parties at their October 1989 meeting.

5. A meeting of Directors of Regional Activity Centres (ROCC,BP,PAP,SPA) was convened in Athens on 20-21 February 1989 with a view to co-ordinate activities and agree on future programmes. The meeting reviewed a draft document prepared by the secretariat on the presentation of the 1990-1991 programme budget by objectives as requested by the Expanded Bureau, as well as the revised version of the Executive Director's paper on re-focusing of MAP. The meeting decided to convene a regular meeting of all Directors every year.

6. The first meeting of the Bureau of the Contracting Parties in 1989 was convened in Athens on 14-15 March (UNEP/BUR/34/7). It reviewed progress achieved since its last meeting, reviewed the revised paper on refocussing of MAP and decided that the secretariat should revise it on the basis of comments made and to submit it to the next Ordinary Meeting of the Contracting Parties (October 89). The meeting also reviewed the 1990-1991 programme budget by objectives proposed by the secretariat. The meeting was chaired by H.E. Mr. George Ktenas, Alternate Minister for the Environment, Greece.

7. As regards document UNEP/BUR/34/5 "Integrated planning of the Development and Management of the Resources of the Mediterranean Basin" (MAP Pilot Projects), the Bureau reviewed the document and requested the secretariat to revise it on the basis of comments made and to submit it to the joint meeting of the two committees.

8. The Bureau also decided that the two Committees (Scientific and Technical and Socio-Economic) should meet in a joint session from 26 to 30 June 1989 in Athens.

2. Programme Coordination

9. The Coordinating Unit continued to play its co-ordinating, catalytic and stimulating role as the overall technical co-ordinator of the Action Plan, the convention and its related protocols. Intensive contacts were undertaken with a view to strengthen co-operation and avoid unnecessary overlapping and duplication of efforts with financial institutions, intergovernmental organizations, non-governmental organizations and sub-regional agreements. A Consultation meeting between the UNEP Regional Office for Western Asia (ROWA)(Bahrain) and MAP took place in Athens from 19-22 October 1987. The purpose of the Consultation was to review activities in order to pinpoint few actions for joint undertaking.

10. Contacts continued with the World Bank with a view to identify areas of common interest and determine a procedure for regular consultation whereby the Bank's assistance may take into account the work already done or being done in MAP in order to support it. During a consultation meeting between the Bank and UNEP (Nairobi, 9 December 1988), UNEP proposed a Memorandum of Understanding to be signed by UNEP and the Bank recognizing the mutual and complementary interest of the two organizations in the protection and development of the Mediterranean basin.

In this connection, a meeting of the Resident Representatives of UNDP was convened in Malta, 27-30 March 1989 by the Bureau for Arab States and Europe, UNDP. It was prompted by the World Bank initiatives in the Mediterranean, its country mission and environmental report on Tunisia, and contacts with UNDP Headquarters aiming at developing a joint new technical assistance programme for environment in the Mediterranean (METAP). The Coordinator of MAP attended this meeting and briefed the participants on UNEP/MAP views. He requested clarification on whether funds would be available for activities decided by the Contracting Parties or for those decided by the Bank; whether they could be used for region-wide projects or selectively for specific countries.

11. The regular yearly meeting of the Inter-Agency Advisory Committee (IAAC) was convened in Athens (January 89) with a view to strengthen and co-ordinate activities on MED POL with UN Agencies during this period of refocusing of MAP, which would require adjustments within MED POL, in order to strengthen the Secretariat's capability for coastal zone management and to reflect the changing needs and experience accumulated since the start of phase II in 1981.

12. Contacts and co-operation with national authorities were strengthened through the national focal points and through country missions.

13. The staff of the Coordinating Unit participated in various national and international meetings with a view to represent MAP and its activities and to strengthen co-operation with other interested bodies.

14. Pursuant to the decisions of the Fifth Ordinary Meeting of the Contracting Parties (Athens, September 1987), a consultant, Mr. Scicluna (Malta) was requested to prepare a paper on the contribution of international organizations to the objectives of the Mediterranean Action Plan with the objective of preparing a list of regional and multi-national projects in the framework of MAP which require support. The paper was sent to UN Organizations for their final comments. The paper will be distributed for information.

15. Tunisia has established a new Agency for environmental protection by law No. 91 of 2 August 1988 (Agence National de protection de l'Environnement). Mr. Noureddine Kamoun was designated as President Director General of the Agency.

16. Israel has established a Ministry for the Environment. Mr. Roni Milo was appointed Minister of the Environment.

17. The European Community has issued the fifth and the sixth reports on how the member countries of the Community are putting the directive on bathing waters into effect and how far the designated beaches meet the standards which are laid down. In an effort to inform other Contracting Parties of the Barcelona Convention of the EEC activities, the reports were distributed to all Contracting Parties in 1989.

18. A meeting of Non-Governmental Organizations has been tentatively included in the MAP workplan, subject to availability of funds. In this connexion a study on the Mediterranean Non-Governmental organizations is being undertaken by the University of Aix-en-Provence. It is co-financed by the French Government through the Ministry of Environment, the Friedrich Naumann Foundation and MAP. A contribution from the Council of Europe is also expected. It is expected that the meeting will take place during the first half of l990.

19. During the Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 26-30 June 1989), a number of representatives commented on the experience of the joint meeting from the organizational point of view. The majority of speakers were in favour of separate meetings of the two Committees. Some expressed a

different opinion. However, they all realized that the joint meeting had originally been suggested for the sake of efficiency and saving of expenditure. It was pointed out that the holding of a joint meeting had necesssitated the compressing of a large volume of work into the space of a few days. The experience had been instructive and, with an improvement in the presentation of documents, all MAP components could be covered.

3. Legal component

Offshore Protocol

20. In accordance with the decision of the Fourth Ordinary Meeting of the Contracting Parties (Genoa, September 1985) and in implementation of the provisions of article 7 of the Convention for the protection of the Mediterranean sea against pollution, a draft protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Sea-bed and its subsoil has been prepared by the International Juridical Organization (IJO) and was reviewed by a technical consultation meeting (Athens, 1986). The Contracting Parties were requested to send their comments on the draft protocol.

21. A reminder was sent to all Contracting Parties on 15 November 1988, requesting their comments on the draft offshore protocol. Written comments received from France, Italy, Spain, Malta, Egypt, Israel and from E & P Forum were sent to the International Juridical Organization for consideration. It is now proposed to convene a Working Group of government-nominated experts to review the new version of the draft with a view to convene a Conference of Plenipotentiaries in Athens during 1990 to consider, approve and sign the draft protocol.

Other Legal Matters

22. Based on the recommendation of the Contracting Parties during their last meeting of approving the compilation of Greek legislation related to the Barcelona Convention as a model for similar compilation of legislative provisions of other countries, the Secretariat started contacts with three Contracting Parties (Israel, Syria and Yugoslavia) for the same objective.

23. At its 43rd Session (1988), the United Nations General Assembly adopted a resolution concerning strengthening of security and co-operation in the Mediterranean Region. The resolution reaffirmed the importance of intensifying and constantly promoting contacts in all fields where common interests exist in order to eliminate gradually, through co-operation, the causes preventing the faster social and economic development of the Mediterranean States, particularly developing States of the region. The resolution invited States members of the relevant regional organizations to lend support and to submit to the Secretary General concrete ideas and suggestions on their potential contribution to the strengthening of peace and co-operation in the Mediterranean region.

24. The Hellenic Marine Environment Protection Association (HELMEPA), organized a workshop on "the elimination of garbage from the Mediterranean and its adoption as an effective special area to Annex V of MARPOL 73/78 (Athens, 29-30 June l989). UNEP/MAP participated in the workshop.

4. Implementation of the Land-Based Sources (LBS) Protocol and Dumping Protocol

Implementation of LBS and Dumping protocols

25. On 28 June 1988 Cyprus deposited its instrument of accession to the Protocol for the Protection of the Mediterranean Sea against Pollution from land-based sources bringing to twelve the total number of Contracting Parties who had ratified, acceded or approved the Protocol.

26. Information was received from a number of Contracting Parties on their existing national legislation related to the requirements of the LBS Protocol.

27. No information was received from Contracting Parties on new regulations related to the enforcement of Environmental Quality Criteria or Emission Standards adopted.

28. Assistance is still offered by the secretariat to Contracting Parties who may need it, towards the application of the Environmental Quality Criteria or Emission Standards recently adopted.

29. During 1988 and 1989 the secretariat received annual reports for 1987 on dumping activities from France, Israel and Italy and "nil reports" from Greece and Malta.

30. During 1989 the secretariat received from Israel the annual report on dumping activities for the year 1988.

Implementation of LBS workplan activities

31. The final draft version of the questionnaires on liquid domestic discharges, industrial pollutants, and petroleum hydrocarbons were completed and submitted to national MED POL coordinators for comments. The final version was prepared on the basis of comments received, and was submitted to national coordinators in June 1989.

32. The pilot project on monitoring of selected submarine outfall structures in the Mediterranean was completed and the results were evaluated by a small expert group meeting held in Madrid from 3 to 5 July 1989, which also reviewed requirements for the preparation of guidelines in terms of Article 7.1.(a) of the protocol.

33. The draft guidelines for authorizations for the discharge of liquid wastes into the Mediterranean sea, in terms of Article 6 of the protocol, were comprehensively revised, and the current version will be reviewed by an expert consultation meeting in Alexandria in November 1989.

34. Preparatory work commenced on the first draft of the guidelines on effluents requiring separate treatment, which will also be reviewed by the Alexandria meeting in November 1989 as well as on the compilation of the necessary material regarding the use of alternative products and processes.

35. Following the receipt of additional material from a number of Mediterranean countries, preparation of the revised version of the 1976 WHO/UNEP document on national legislation on the prevention and control of marine pollution from land-based sources commenced in January 1989, and is scheduled for completion towards the end of the year.

36. A detailed outline of the Annex IV to the LBS Protocol aiming at defining conditions under which the Protocol could be applied to harmful substances transported to the Mediterranean Sea Area through the atmosphere, was prepared during an ad hoc meeting in Athens, in December 1988 (Doc. UNEP(OCA)/MED WG.6/1), and sent for comments to the National Coordinators. The first draft of Annex IV will be prepared by a consultant by the end of September 1989 and the second draft will be presented to Contracting Parties in 1990.

Pilot monitoring surveys

Pilot survey on organotin compounds

37. A pilot survey on organotin in selected Mediterranean areas was undertaken during 1988 in order to generate data on levels of tributyltin (TBT) and its derivatives in the region. Before initiating the exercise a small workshop on the methodology and intercalibration for organotin compounds determination, attended by the principal investigators of the survey, took place in Monaco from 18 to 20 April 1988.

38. The survey covered 17 locations from the French Mediterranean coast, the Northern Tyrrhenian coast, the Southern coast of Turkey and the Alexandria coastal area. 113 water samples and 35 sediment samples were analysed. The range of concentrations found are comparable to those known to be present in similar situations outside the Mediterranean area. A full report on this survey, prepared by the principal investigators who met in Erdemli, Turkey, (7-9 November 1988), appears in document FIR/MEDPOL/OT/5.

39. The survey has shown conclusively that there are high concentrations of TBT in the vicinity of harbours and marinas and in fact its results have reinforced the need for regulatory action.

Pilot survey on organophosphorus compounds

40. A pilot survey on selected organophosphorus pesticide and non-pesticide compounds in selected Mediterranean areas, the Ebro and Llobregat estuaries (Spain), the river Po mouth and Northern Adriatic coast (Italy), the Haifa Bay and the Lake Kinneret watershed (Israel) and Rosetta Nile mouth and Edffina (Egypt), was undertaken during 1988. A small workshop, attended by the principal investigators of the survey, took place in Monaco from 13 to 15 April 1988, on methodology and intercalibration for organophosphorus determination.

41. The survey revealed for the first time the presence of Tris-2-chloro-ethylphosphate (TCEP) in Spanish rivers and levels up to 0.3 $\mu g\ 1^{-1}$ indicate its use in the monitored area. Also Tris-chloro-isoprophylphosphate (TCPP) has been detected for the first time in Italian surface waters reaching values similar to the other organophosphorus non-pesticide compounds. Organophosphorus pesticides were found in fish but not in mussels from Spain and Italy. A full report on this survey prepared by the principal investigators who met in Barcelona (24-26 January 1989), appears in document FIR/MEDPOL/OP/5.

42. The results of the survey will be taken into consideration when finalizing the assessment document on organophosphorus compounds.

Pilot survey on persistent synthetic materials

43. Observations are being carried out since May 1988 of persistent synthetic materials and litter on several separate beach areas and pelagic zones in five Mediterranean countries, using the methods agreed upon at the ad hoc expert consultation (Athens, 16-18 October 1987). Data are regularly reported and two experts have been invited to prepare overviews for beach areas and pelagic zones, respectively. An expert consultation with the participating institutions was organized in Haifa from 12 to 14 June 1989 to review the progress and prepare the initial overview report of the pilot project.

Pilot survey on carcinogenic/mutagenic compounds

44. Following the recommendations of the expert consultation meeting on carcinogenic and mutagenic marine pollutants in the Mediterranean, held in Athens from 23 to 25 June 1988 (EUR/ICP/CEH 060(5)), preparations were completed for a pilot survey of levels of the more important substances in selected areas of the Mediterranean. The survey commenced in early July 1989.

Pollution assessment documents and Environmental Quality Criteria

Used lubricating oils

45. Following the submission of simplified questionnaires to countries, the assessment document was revised on the basis of replies received, and is presented in document UNEP(OCA)/MED WG.3/Inf.4. The proposed measures appear in document UNEP(OCA)/MED IG.1/3.

Cadmium and cadmium compounds

46. Document UNEP/WG.160/9 entitled "Assessment of the state of pollution of the Mediterranean Sea by cadmium and cadmium compounds and proposed measures" was submitted to the Fifth meeting of the Working Group for Scientific and Technical Co-operation (Athens, 6-10 April 1987). Following the comments made by the Group a revised document was prepared (UNEP(OCA)/MED WG.3/Inf.5) for consideration by the Joint Meeting of the Scientific and Technical Committee and the Socio-Economice Committee (Athens, 26-30 June 1989). The proposed measures appear in document UNEP(OCA)/MED IG.1/3.

Organotin compounds

47. Document UNEP(OCA)/MED WG 1/7 entitled "Assessment of organotin compounds as marine pollutants and proposed measures for the Mediterranean" was prepared and submitted to the First Meeting of the Scientific and Technical Committee (Athens, 23-27 May 1988) for consideration. The proposed measures included a ban on the use of anti fouling paints containing tri-organtin compounds on boats of less than 25 m long and on structures associated with mariculture as well as a ban on the use of free association TBT paints on boats greater than 25 m long. On this last point, the Committee was of the opinion that measures for sea-going vessels should only be taken at an international level and specifically within IMO's framework. The proposed measures, revised by the Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 26-30 June l989), appear in document UNEP(OCA)/MED IG.1/3.

48. As far as the measures for sea-going vessels are concerned the Coordinating Unit was represented at the 27th Session of the Marine Environment Protection Committee (MEPC) of IMO (London, 13-17 March 1989) where the subject was discussed. As a result of the discussions the MEPC decided to add this topic to its work programme with 1990 as the target year for completing the work.

Organohalogen compounds

49. An assessment document on organohalogen compounds was prepared and presented at the Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 26-30 June l989), (UNEP(OCA)/MED WG.3/Inf.6). It deals with only a few compounds for which available information was considered sufficient. The proposed measures appear in document UNEP(OCA)/MED IG.1/3.

Organophosphorus compounds

50. The first draft of the assessment document on organophosphorus compounds has been completed. This now will be revised to include recent information from the Mediterranean and then it will be sent, together with the proposed measures to MED POL National Coordinators for comments.

Research and study topics

51. Under this chapter, only research activities more immediately linked to the implementation of the LBS protocol are considered. Other research activities are covered in chapter 2.6. More details on the research projects are given in document "Supplementary information on the Implementation of MED POL in 1988-1989" which is presented as a reference document to this meeting.

Activity B - Development of reporting formats

Projects completed in 1988: - 0
Projects ongoing on 31.12.1988: - 1
Total 1988 contribution: - US$ 3,500.

52. The project under this activity, which commenced in 1986 and is scheduled for completion in 1989, deals with the development of approaches for the continuous assessment of pollutant loads.

Activity C - Formulation of the scientific rationale for the environmental quality criteria

Projects completed in 1988: - 2
Projects ongoing on 31.12.1988: - 3
Total 1988 contribution: - US$ 10,500.

53. Completed projects dealt with intercomparisons of techniques for monitoring shellfish waters in relation to environmental quality criteria, and development of models for calculating the environmental capacity of seawater. Ongoing projects, two of which were extended from 1987, and one newly-accepted, deal with studies related to environmental quality criteria for coastal waters.

54. A consultation meeting on health-related environmental quality criteria in the Mediterranean was held in Bled, Yugoslavia, from 12 to 16 September 1988, and attended by 23 experts from 9 Mediterranean countries and 4 from non-Mediterranean countries. The meeting which was financed from WHO regular budget funds, reviewed the results of the pilot phase of the project on health hazards from methylmercury in Mediterranean seafood, finalized the protocol for epidemiological studies, agreed on the procedures for the second phase of the project, and reviewed future requirements in connection with health-related criteria vis-a-vis metal pollutants in Annexes I and II to the LBS protocol.

Activity D - Epidemiological studies

Projects completed in 1988: - 7
Projects ongoing on 31.12.1988: - 15
Total 1988 contribution: - US$ 43,000.

55. Completed projects dealt with mercury and methylmercury in seafood and related health hazards, with neurotoxins in shellfish and with the analysis of mercury and methylmercury in seafood. Ongoing projects, of which four were formally extended from 1987 and six newly-accepted, deal with microbiological epidemiological studies correlating seawater quality with health effects, health hazards from mercury and cadmium in seafood, marine biotoxins, and pathogenic micro-organisms in seawater.

56. The expert meeting in Bled in September 1988 described under Activity C also dealt with this activity. In accordance with the recommendations of this meeting regarding the second phase of the methylmercury project, the Ministries of Health of all Mediterranean countries were formally requested by the WHO Regional Office for Europe to provide information regarding coastal areas where consumption of seafood was above average, with a view to identifying possible areas of concern.

Activity E - Development of proposals for guidelines and criteria

Projects completed in 1988: - 0
Projects ongoing on 31.12.1988: - 4
Total 1988 contribution: - US$ 7,000.

57. All four ongoing projects are intimately linked with LBS activities and deal with submarine outfall structure design, studies on used lubricating oils in effluents, health-related environmental impact assessment in selected projects, and coastal pollution by solid wastes.

Activity G - Research on the toxicity, persistence, bioaccumulation, carcinogenicity and mutagenicity

Projects completed in 1988 - 6
Projects ongoing on 31.12.1988 - 26
Total 1988 contribution - US$ 66,500.

58. Five projects were completed in 1988 studying toxicity effects of selected contaminants to marine organisms. The 18 ongoing projects cover research areas such as:

a) Study of toxicity effects of chromium, zinc, copper, lead, cadmium, selenium and arsenic in various marine organisms.
b) Bioaccumulation, persistance and toxicity of uranium and plutonium in certain consumable organisms.
c) Study of bioprotection mechanisms in organisms.
d) Accumulation of tin, organotin, mercury and thallium in organisms.
e) Study of metal-binding proteins.

A new set of final reports were published in MAP Technical Reports No. 24.

59. Of the ongoing projects on carcinogenicity and/or mutagenicity of marine pollutants, six were formally extended from 1987 and two newly-accepted. They deal with the development of short-term tests for pollutant mutagenicity, the relationship between carcinogenic marine pollutants and human degenerative disease, and the effects of various environmental factors on the carcinogenicity and/or mutagenicity of marine pollutants.

60. The FAO/UNEP consultation meeting on the toxicity of selected substances to marine organisms was held in Villefranche-sur-mer, France, from 10-14 October 1988. The meeting critically reviewed the work undertaken so far in the framework of this activity and made certain recommendations as regards the future activities (document FIR/MEDPOL/TOX/8). The meeting also revised the three draft reference methods (no. 43, 44, 45) on acute toxicity based on the results of an inter-laboratory acute toxicity testing exercise with marine organisms.

5. Monitoring of Marine Pollution in the Mediterranean

National monitoring programmes

61. By the end of 1988 nine national monitoring programmes had been signed with Algeria, Cyprus, Greece, Israel, Lebanon, Malta, Morocco, Syria and Yugoslavia, respectively. Although a yearly formal agreement was not reached, indications were given by the respective national coordinators that monitoring activities were also ongoing in Egypt and Libya who had both signed an agreement in 1986. The national coordinators of France, Monaco, Spain and Italy informed that, although a signed agreement was not necessary, in their respective countries a network of monitoring stations existed and that information and data would be transmitted to the Coordinating Unit. By August 1989, Egypt had finalized the l989 National Monitoring Programme and Tunisia had submitted a draft

programme for l989. Turkey expressed the will to propose a monitoring programme in l989. More details on the countries' participation in the monitoring component of MED POL are given in document "Supplementary information on the Implementation of MED POL in 1988-1989" which is presented as a reference document to this meeting.

62. During 1988 the secretariat, directly or through the Cooperating Agencies, provided assistance either in cash or in equipment and material to the countries that had finalized the monitoring agreement for a total of US$ 346,700 The monitoring assistance was distributed as follows: Algeria 36,000 US$, Cyprus 25,000 US$, Egypt 9,700 US$ Greece 60,000 US$, Israel 38,000 US$, Lebanon 40,000 US$, Malta 14,000 US$, Morocco 34,000 US$, Syria 36,000 US$ and Yugoslavia 54,000 US$. In most cases, the above figures represent only funds committed, which may bring minor changes when final invoices are paid.

63. As of August 1989, 1988 data were received from Israel, Italy, Lebanon, Malta and Morocco, mostly on coastal waters.

64. As to activities related to the monitoring of the transport of pollution through the atmosphere, by August 1989 six countries (Cyprus, France, Israel, Tunisia, Turkey and Yugoslavia) had expressed interest in this type of monitoring but no countries had included this type of monitoring into their national monitoring agreement. In 1988 three automatic precipitation collectors were provided to Cyprus, Spain and Turkey in connection with their participation in the pilot monitoring project still being implemented as part of the research component of MED POL (activity 'L').

65. During 1988, in line with the refocusing of the entire Mediterranean Action Plan, a thorough evaluation of the available MED POL monitoring data and programme was made by the Coordinating Unit. In particular, the available data on heavy metals, chlorinated hydrocarbons, petroleum hydrocarbons and microbial pollution were analyzed and an evaluation was made through consultants. Two small ad hoc meetings were held in Monaco on 26 April and 27-28 June to discuss and finalize the evaluation documents. The documents were presented to a meeting of responsible investigators of national monitoring programmes (Athens, 20-23 March 1989) together with an account on the state of the monitoring component of MED POL and proposed changes for the biennium 1990-1991 (UNEP(OCA)/MED WG.5/3).

Data Quality Assurance

66. A comprehensive programme of technical support to selected monitoring laboratories was initiated in 1988 and coordinated by the Marine Environmental Studies Laboratory MESL (of IAEA) in Monaco. Specialist training was provided to a total of 18 staff from laboratories in Egypt, Algeria, Morocco, Libya and Cyprus.

67. Extended visits were made (joint monitoring exercises) by specialist staff from Monaco to laboratories in Egypt, Algeria and Morocco and specific assistance was given for setting up national quality assurance programmes in these countries. A training cruise was also organized on the Moroccan vessel Sharif Al Idrissi from 10-15 May 1988. The Quality Assurance programme will continue (in its pilot phase) through 1989. Two group training courses on determination of organohalogens and petroleum hydrocarbons are scheduled for September l989.

68. As an additional service to regional laboratories a bank of reference materials and standards is being established in Monaco in order to provide direct assistance on data quality assurance to the regional monitoring and research laboratories.

Intercalibration

69. The following intercalibration exercises were initiated during 1988: Trace metals in Mediterranean pelagic sediments (SD-M-2/TM); Chlorinated hydrocarbons in Mediterranean pelagic sediments (SD-M-2/OC); Trace metals in Mediterranean tuna fish (IAEA-350); Halogenated hydrocarbons in Mediterranean tuna fish.

70. These exercises terminated in May 1989. A further two "hot-spot" exercises are planned for mid 1989.

71. Final reports were issued on three completed exercises:

Intercalibration of Analytical Methods on Marine Environmental Samples: Trace Element Measurements on Fish Homogenate (MA-B-3/TM) (IAEA Report No.36).

Final Report on the Intercomparison of Organochlorine Compounds in Shrimp Homogenate (MA-A-3/OC) and on Fish Homogenate (MA-B-3/OC) (IAEA Report No.37).

Final Report on the Intercalibration Exercise of Petroleum Hydrocarbons in Oyster (MA-K-1/PH) and in Sediment (SD-K-1/PH) (IAEA Report No.38).

72. A systematic review of the progress of data quality in the past 10 years was made. This revealed a steady improvement in data quality for trace metals as MEDPOL has progressed (MEDPOL data is now better than the world average). Data quality for organic contaminants, however, has not shown a marked improvement and considerable attention is still required to these parameters.

73. A training course and intercalibration exercises on microbiological methods in marine pollution monitoring was held in Athens from 9 to 14 May 1988 in collaboration with the Environmental Pollution Control Project (PERPA), and was attended by 18 participants from 10 Mediterranean countries (EUR/ICP/CEH 061(5). The course was held in English, and a similar course in French is scheduled for 16 - 21 October 1989 in Tunis.

Maintenance

74. Regular service visits to MEDPOL participating institutions continued throughout 1989 by the MEDPOL instrument maintenance engineer based at the Marine Environmental Studies Laboratory (of ILMR, IAEA) in Monaco. In addition to regular and emergency service visits of laboratory and field instruments, the MESL-based engineer continued to be in charge of the maintenance of WANG computers provided to the SPA/RAC in Tunis, ROCC in Malta and PAP/RAC in Split.

75. More details on the maintenance service visits are given in document "Supplementary information on the Implementation of MED POL in 1988-1989" which is presented as a reference document to this meeting.

MED POL Data Processing

76. By August 1989 all MED POL PHASE I data residing on the WANG VS/80 mini system have been converted into PC usable form and the analysis steps have been initiated. This backlog consists of over 20,000 microbiological, over 15,000 heavy metals and almost 7,000 halogenated hydrocarbons data records.

77. The description of MED POL PHASE II Monitoring Agreements, covering parameters and matrices for sources of pollution, coastal waters and reference areas, has been computerized. The relevant database currently consists of almost 1,500 data records, covering the period 1983-1988 for 13 Mediterranean countries. Data entry is ongoing.

78. MED POL PHASE II reported monitoring data have been partially computerized. The relevant database consists of more than 15,000 microbiological data records covering eight countries, more than 2,500 heavy metals data records covering nine countries and over 300 halogenated hydrocarbons data records covering six countries. These data cover the 1983-1988 period.

79. Data entry and computerization of petroleum hydrocarbons, effluents' pollution data and nutrients data are underway.

80. A computerized database (MEDLIB) has been established following the retrieval and compilation of the world scientific literature. This database includes more than 1,500 references to the effects of climatic change and over 700 references to marine pollution by organotin compounds. In particular a "Bibliography on effects of climatic change and related topics" MAP Technical Report Series no. 29, was prepared. In addition, references for marine pollution by organophosphorus compounds and plastic litter/marine debris are under preparation.

81. In connection with the data processing activities, a meeting took place in Athens on 6-8 June 1988 and was attended by nine participants. It focussed on the computerization and analysis of marine pollution data. A similar follow-up meeting is planned in the near future.

Research and study topics

82. Under this chapter only research activities more immediately linked to the implementation of the monitoring activities are considered. Research activities more immediately linked to the implementation of the LBS protocol are covered in chapter 1.5.

Activity A - Development of sampling and analytical techniques

Projects completed in 1988: - 5
Projects ongoing on 31.12.1988: - 10
Total 1988 contribution: - US$ 32,500.

83. Microbiological projects continued to be linked to the revision of existing reference methods or to the development of new ones. Two ongoing projects were both extended from 1987.

84. In addition to the above projects, two interlaboratory studies on (a) revision of the methodology for determination of faecal coliforms and isolation of E. coli and (b) comparison of culture media for determination of faecal streptococci, were completed.

85. Other research projects dealt with included new techniques for detecting contaminants at important interfaces in the area, and testing methods and approaches for monitoring persistant material and litter.

86. Other projects also dealt with the analysis of heavy metals, organotin and organophosphorus compounds.

Activity F - Research on oceanographic processes

Projects completed in 1988: - 4
Projects ongoing on 31.12.1988: - 11
Total contribution: - US$ 24,000.

87. The main subjects dealt with concerned modelling of circulation, optimization, vertical and alongshore transports and monitoring of physical oceanography factors (currents).

Activity H - Research on Eutrophication and concomitant plankton blooms

Projects completed in 1988: - 1
Projects ongoing on 31.12.1988: - 8
Total 1988 contributions: - US$ 27,500

88. A project was completed in 1988 dealing with eutrophication and plankton blooms in Northern Adriatic. The ongoing projects include:

a) the study of eutrophication trends in N. Adriatic
b) the effect of run-off on plankton populations
c) the study of jelly fish blooms

89. A UNEP/FAO/IOC/WHO meeting was organised (Athens, 20-23 March, 1989 on the Control and Implications of Undesirable Plankton Blooms (UNEP(OCA)/MED WG.4/2), as described in chapter 2.9.

Activity I - Study of ecosystem modifications in areas influenced by pollutants

Projects completed in 1988: - NIL
Projects ongoing on 31.12.1988: - 7
Total 1988 contributions: - US$ 15,500

90. The ongoing projects cover topics such as:

a) the study of the effects of pollution on ichthyoplankton, benthic communities, plankton composition etc.

b) ecological mapping of phyto-indicators of coastal pollution
c) trends of the pelagic ecosystem in the Ligurian sea from the beginning of the century

91. As a follow-up to the recommendations of the FAO/UNEP Meeting on the effects of pollution on marine ecosystems held in Blanes, Spain, 7-11 October 1985, (FAO Fisheries Report no. 352) a FAO/IOC/UNEP Training Workshop on the statistical treatment and interpretation of marine community data was organised in Piran, Yugoslavia from 14-24 June 1988 (FIR/MEDPOL/TW/3). It was attended by 26 participants from 10 Mediterranean countries. The technical responsibility was entrusted to IOC's Group of Experts on the Effects of Pollution (GEEP) members of which acted as lecturers.

92. Another recommendation of the Blanes meeting was that the manual on Ecological Assessment of Pollution Effects should be revised. The revision has already been undertaken by consultants.

Activity J - Effects on thermal discharges

Projects completed in 1988: - NIL
Projects ongoing on 31.12.1988: - 1
Total 1988 contributions: - NIL

93. One project is ongoing in Algeria studying thermal pollution effects on benthic communities.

Activity K - Biogeochemical cycle of specific pollutants

Projects completed in 1988: - 5
Projects ongoing on 31.12.1988: - 13
Total 1988 contribution: - US$ 39,000.

94. In the microbiological component of this activity, completed projects covered various aspects of pathogen adaptation to, and survival in, seawater. Ongoing projects, of which 2 were formally extended from 1987 and 2 newly-accepted, cover field studies on discharge from sewage outfalls, inactivation of viruses in the marine environment, and adaptation of pathogenic bacteria to seawater.

95. Other ongoing projects deal with the environmental fate of organotin compounds and various aspects of the biogeochemical cycles of mercury and cadmium and synthetic surfactants.

Activity L - Study of pollutant-transfer processes

Projects completed in 1988: - 4
Projects ongoing on 31.12.1988: - 19
Total 1988 contribution: - US$ 58,900.

96. Ongoing projects covered atmospheric transport and deposition of heavy metals into the Ligurian Sea, the Western Mediterranean, the Bay of Naples and the Adriatic Sea, modelling of atmospheric pollutant transport and Land-to-sea transport of photochemical oxidants.

97. Other projects covered transport and fate of waste water discharges and transports through selected straits. Transfer processesrelated to various substances and waste water discharges were studied in both the coastal zone and open sea.

98. Transport mechanisms, distribution and mobilization of heavy metals as well as the flux of radionuclides into the Mediterranean were also studied.

Training and fellowship

99. As in the past, during 1988-1989 assistance was provided to MED POL participants in the form of individual group training, visits of experts to less experienced laboratories, support for participation at MED POL meetings (workshops and intercalibration exercises) and travel grants for attendance at meetings related to the MED POL programme. A total of 80 scientists from 15 countries benefited from this support programme. In addition, thirty Mediterranean experts received a partial or total travel grant to attend the IX ICSEM/IOC/UNEP Workshop on marine pollution and the related scientific committees (Athens 17-22 October 1988). In addition, as mentioned under research activity I, twenty six scientists from ten Mediterranean countries attended the FAO/IOC/UNEP Training Workshop on the Statistical Treatment and Interpretation of Marine Community Data Piran, Yugoslavia, 14-24 June 1989).

100. More details on training and fellowships are given in document "Supplementary information on the Implementation of MED POL in 1988-1989" which is presented as a reference document to this meeting.

Coordination

101. As in the past, the monitoring activities of MED POL were coordinated by the MAP Coordinating Unit through contacts with the MED POL National Coordinators and with the full participation of the relevant Cooperating Agencies (FAO, UNESCO, WHO, WMO, IAEA, IOC).

102. As to the coordination of the research activities of MED POL, as in the past, the relevant Cooperating Agencies were directly responsible for the technical implementation of the various research projects through direct contacts with the national research centres.

103. The active participation of the Cooperating Agencies remained an important factor contributing very significantly to the implementation of MED POL. In addition to the regular and frequent contacts between UNEP and the Cooperating Agencies, two meetings of the Inter-Agency Advisory Committee (IAAC) for MED POL took place between 1988 and 1989, in order to ensure the harmonious co-operation and implementation of the MED POL activities:

- XXI Meeting of IAAC (Athens, 13-15 January 1988); it reviewed the activities carried out in 1987 as well as the procedures and priorities for the implementation of 1988 activities (doc. UNEP/IAAC-XXI/2);

- XXII Meeting of IAAC (Athens, 9-13 January 1989); it reviewed the activities carried out in 1988 and to be implemented in 1989, and prepared a workplan and budget for the 1990-1991 MED POL activities (doc. UNEP(OCA)/MED WG.7/3).

Plankton blooms and eutrophication

104. The problem of undesirable plankton blooms, which had become a recurrent phenomenon and was particularly severe during 1988 in the Mediterranean and other areas, was brought up at various meetings organized within the framework of the Mediterranean Action Plan during 1988. The Mediterranean Coordinating Unit was consequently urged to take the initiative to formulate proposals for remedial action.

105. A meeting on Eutrophication in the Mediterranean sea dealing with the scientific aspects of the problem had already been held, in Bologna, Italy, in March 1987, in the framework of the MED POL activities (MAP Technical Report Series no. 21).

106. At the meeting of the Expanded Bureau of the Contracting Parties to the Barcelona Convention (Athens, 1-2 November 1988) the problem was again discussed and the Secretariat was requested to organize a meeting on the subject. In compliance to this decision, a joint UNEP/FAO/IOC/WHO meeting was convened on the Implications and Control of Undesirable Plankton Blooms and it took place in Athens from 4-6 April 1989 (doc. UNEP(OCA)/MED WG.4/2).

107. The meeting concentrated on the practical issues and discussed the possible causes as well as measures for alleviating the effects of the phenomenon. The meeting also stressed the importance of international co-operation and the need for uniforming the analytical techniques as well as presentation of the results for a better understanding of the problem at regional level.

Implications of expected climatic changes in the Mediterranean region

108. In line with the decision of the Fourteenth Session of the UNEP Governing Council on "Global Climate Changes" (UNEP/GC/DEC/14/20), the Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) of UNEP launched and supported a number of activities designed to assess the potential impact of climate changes and to assist the Governments in the identification and implementation of suitable response measures which may mitigate the negative consequences of the impact.

109. In 1987, Task Teams on Implications of climate change were established for six regions covered by the UNEP Regional Seas Programme (Mediterranean, Wider Caribbean, South Pacific, East Asian Seas, South Asian Seas and South-East Pacific).

110. The initial objective of the Task Teams was to prepare regional overviews and site-specific case studies on the possible impact of predicted climate changes on the ecological systems, as well as on the socio-economic structures and activities of the respective regions.

111. In the Mediterranean six site-specific studies were prepared (Deltas of rivers Nile, Po, Rhone and Ebro, Thermaïkos Gulf and Garaet el Ichkeul/Lac de Bizerte).

112. Mediterranean regional studies and site-specific studies prepared by the Mediterranean Task Team were presented at the Meeting in Split (3-8 Oct. 1988) (UNEP(OCA)/WG.2/25).

113. An overview of the implications of expected climate changes in the Mediterranean region, based on the results of the studies prepared by the Mediterranean Task Team was published (UNEP Regional Seas Reports and Studies No.103 and MAP Technical Reports Series No.27). The edited version of selected papers from the Mediterranean Task Team will be published in a book by Pergamon Press by the end of 1989.

114. The case study on Nile delta was presented at a national seminar (Cairo, 27-28 December 1988, UNEP, 1989). The case study on Po delta and Venice lagoon will be presented on 24-26 May 1989 at a national seminar. Case studies on Ebro delta and Thermaïkos Gulf will be presented at respective national seminars by September 1989 and studies on Rhone delta/Golfe de Lion and Garaet el Ichkeul/Lac de Bizerte by the end of 1989.

115. The development of a climate scenario for the Mediterranean region, with subregional details, is being prepared and will be ready by the end of 1990.

Report on the state of the Mediterranean marine environment

116. A report on the state of the Mediterranean marine environment was prepared by a Task Team established in consultation between Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) of UNEP and the Mediterranean Coordinating Unit. The Task Team was composed of experts and members of the Unit. The report was prepared with the financial support of OCA/PAC and was published as MAP Technical Reports Series No.28. The report covers main characteristics of the region, information on marine contaminants, human activities affecting the Mediterranean Sea, biological effects, prevention and control strategies in the frame of the MAP, implications of climate changes in the Mediterranean region, cost of pollution control and summary.

Prevention and combating pollution from ships

a) Protocol on emergencies

117. To strengthen the capacities of the coastal States in the Mediterranean to respond to pollution caused by oil and other harmful substances especially in the case of emergency, the Regional Oil Combating Centre (ROCC) carried out various activities during the period under consideration and in conformity with the approved workplan. Activities have been focused on conducting training courses (general/practical) on combating pollution caused by oil and updating the main documentation (Directory of participants, Directory of marine anti-pollution terms, etc.):

118. Studies and surveys:

- ROCC's Technical Expert participated in a maritime sector assignment mission organized by the World Bank Environmental Programme for the Mediterranean in three Mediterranean countries (Algeria, Yugoslavia, Turkey) from 26 May to 17 June 1988.

A technical report has been prepared by ROCC's Technical Expert.

- ROCC published and disseminated in January 1989 its annually updated List of Alerts and Accidents in the Mediterranean.

119. Training Courses organized and partly financed by ROCC:

MEDIPOL 88 training course was held from 8 to 18 March 1988. Like previous MEDIPOLs, this is a general training course on marine pollution combating organized annually by ROCC at its premises in Malta. For the first time, the programme was extended to harmful substances other than oil. EEC supported financially the participation of 11 participants from EEC countries (7 from non Mediterraneans countries, 4 from Mediterranean countries). ROCC supported financially 10 participants coming from Mediterranean countries. Six participants from Italy (1), Greece (1), Libya (2) and Kuwait (2) were supported by their oil companies.

MEDEXPOL 88 practical training course on Containment and Recovery Techniques at Sea, took place in Ercolano, Italy from 28 September 1988 to 04 October 1988. It was organized with the logistic support of CASTALIA S.p.A. (Società Italiana per l'Ambiente) and the cost was shared between the Centre and the European Economic Community (EEC) on a 50/50 basis.

120. Training courses organized in co-operation with ROCC:

A training course on Marine Pollution Prevention, Control and Response, organized by the Arab Maritime Transport Academy (AMTA) with ROCC technical support was held in Alexandria, Egypt, from 12 to 19 November 1988.

121. Workshop on Combating Accidental Pollution by Harmful Substances:

Following the decision of the Contracting Parties (see UNEP/IG.74/5, Section II, M) a Workshop was organized to provide the participants with an overview of the problems related to maritime transportation of harmful substances and accidental spillages, and to discuss and approve recommendations concerning:

- Actions which should be undertaken to combat accidental pollution of the Mediterranean Sea by harmful substances;

- Functions of the Centre;

- Workplan for future activities.

122. The Workshop took place in Malta from 22 to 26 May 1989. Its recommendations were reviewed and endorsed by the joint meeting of the Technical Committees.

123. ROCC INFO 20, 21 and 22 were prepared and disseminated in January 1988, in June 1988 and in May 1989 respectively.

124. An updated edition of the "Directory of the Mediterranean Region of Participants to Marine Pollution Combating Training Courses" was disseminated in April 1988.

A new edition is under preparation which will include a breakdown of costs of participation per country and per training course in order to produce a clear picture of ROCC's efforts in training of personnel for Mediterranean coastal States.

125. A new bilingual, enriched and updated edition of the "Concise Dictionary of Marine Anti-pollution Terms" was disseminated in June 1988.

126. The fourth edition of the "Guide for Combating Accidental Marine Pollution in the Mediterranean Sea" is being issued in July 1988. A section dealing with harmful substances other than oil has been introduced. The title of this edition, which now covers accidental marine pollution as a whole, has been modified.

127. A new inventory of "Experts in Marine Pollution Combating"
for the Mediterranean region has been disseminated in September 1988.

128. The third edition of the "Catalogue of Spill Response Equipment and Products" has been disseminated in March 1989. New products which had been introduced on the market in the last two years were included and the others which had dissappeared were deleted. The list of manufacturers and distributors was also updated and corrected.

129. All these documents are produced in the two official languages of the Centre: French and English.

130. Upon the retirement of Mr. M. Voirin, Mr. J.C. Sainlos was appointed as Director. Following the decision of the Bureau the post of Deputy Director has been abolished on 31 December 1988 and a chemist is under recruitment.

131. Alert and Communication Exercise: During the week 6 to 9 March 1989, the Centre organized an alert and communication exercise with a view to test the level of preparedness of the Mediterranean countries to communicate with the Centre and between themselves and to co-operate in case of a serious pollution accident.

132. At the request of Yugoslavia, ROCC provided assistance in finalizing Yugoslav's National Contingency Plan. The Technical Expert of the Centre visited Yugoslavia from 28 February 1989 to 5 March 1989 for this purpose.

133. The Director of the Centre visited several countries: Yugoslavia - 17 February 1989, Greece - 22 February 1989, Turkey - 23 February 1989, France - 30 March 1989, Italy - 31 March 1989 and EEC Commission - 26 November 1988. The main purpose of these visits was to establish direct personal contact with ROCC Focal Points and to discuss the goal of the regional co-operation and the objectives of the Centre in that connection as well as to introduce the Workshop of May 1989 and to emphasize its importance. The Director plans to visit the other countries of the region before the end of the year.

134. The Centre was faced with the problem of unavailability of proper equipment for word processing and data processing as well as for communications. The present computer equipment (1 OIS WP and 1 Wang PC) are far from adequate for carrying out the Centre's tasks. The delay in approving the funding for acquisition of additional equipment, has unnecessarily aggravated the situation. The Centre is currently in the process of purchasing additional equipment (1 IBM PC/AT compatible and a facsimile -as a first priority).

    The capabilities of the Centre in word processing, data processing, photocopying as well as communications have to be progressively developped to reach adequate levels as proposed by the Computer Officer of MEDU.

135. Due to the abolishment of the post of Deputy Director (Administration and Finance) an organizational change took place as from 01 January 1989. Under the direct supervision of the Director, administrative duties were distributed amongst the General Service Staff. The Director requested IMO to send an officer from the Personnel Section of IMO to assist with the organization of ROCC. The visit took place from 5 to 10 March 1989. The Report of the Mission will be officially transmitted soon; it will include a proposal of new job descriptions and grading for the General Service Staff.

136. The negotiations for the signature of a Headquarters Agreement between the Maltese Government and IMO have been re-opened and this question is under discussion at the moment. During these negotiations, it was mentioned by the Maltese official, that the Maltese Government will commit itself to provide new premises for ROCC with the same facilities and under the same conditions if the Centre had to move in the future. This commitment of the Maltese Government, will be reflected in the Headquarters Agreement.

b) Port reception facilities

137. Establishment of reception facilities for dirty ballast waters and other oily residues received from tankers and ships in ports of the Mediterranean was one of the ten targets selected by the Contracting Parties (Genoa, September 1985) to be achieved as a matter of priority during the second decade of the Mediterranean Action Plan (Genoa Declaration). Furthermore, in accordance with MARPOL Convention (73/78), the discharge of dirty ballast waters is banned in special areas such as the Mediterranean Sea.

138. The first concrete example in the road to achieve this target was the close collaboration of the Coordinating Unit, the European Economic Community and the national and regional authorities in Yugoslavia, Greece and Tunisia, in the form of establishing reception facilities in Rijeka, Patras and Tunis respectively. Consultation with Egypt in regard to the establishment of reception facilities in Port Said has started but not yet finalized. The envisaged new environmental programme for the Mediterranean launched by the World Bank and the interest expressed by the European Investment Bank along with the EEC Programme for the protection of the environment in the Mediterranean (MEDSPA), could be a new venue for financing assistance to Mediterranean coastal States interested to establish port reception facilities.

139. In order to obtain information on the actual situation and requirements of Contracting Parties in the field of port reception facilities (permanent or floating), a letter was sent to all countries on 7 March 1988 requesting more information on existing and potential facilities, costs, timetable and problems encountered. Only four countries have sent their response (Algeria, Greece, Turkey and Malta).

140. In order to place emphasis on the present lack of adequate reception facilities, a workshop was organized by HELMEPA-IMO in Piraeus, Greece on 28 and 29 November 1988 with the participation of shipping companies, seafarers, associations, international oil companies, government agencies, classification societies, and shipping finance institutions.

The workshop adopted a resolution strongly appealing to the international maritime community to effectively implement MARPOL 73/78 on a truly global scale and in particular to launch a new initiative to overcome the present lack of adequate reception facilities through:

- Renewed efforts by Parties to MARPOL 73/78 to fully meet their obligations in respect of their own ports and to provide assistance through multi-lateral and bi-lateral aid schemes.

- Promotion of internationally financed schemes involving oil exporting countries and both the private and public financing sectors, as appropriate, for the design and construction of ballast reception facilities in "special areas" which has been identified as the most serious impediment to the implementation of Annex I of MARPOL 73/78.

141. The joint meeting of the Contracting Parties (Athens, 26-30 June 1989) approved a programme budget for 1990-1991 relative to the follow-up on the establishment of port reception facilities in 56 major ports in the Mediterranean region and assistance to participants in training courses relevant to port reception facilities.

7. Protection of the common Mediterranean heritage

a) Protocol on Specially Protected Areas

142. The Specially Protected Areas/Regional Activity Centre (SPA/RAC) has carried out its 1988/1989 activities in consistency with the approved workplan. In particular, the following activities were carried out:

Directory of marine and coastal protected areas in the Mediterranean region

143. The English version of the first part of the Directory of the existing protected areas (those of ecological or biological interest) was completed in November 1988 and submitted to the Coordinating Unit for editing. It was published and distributed under MAP Technical Reports Series No.: 26. The French version will be ready during the second half of 1989.

Computerized data banks on the areas, experts and reference material

144. The computerized data banks showed little progress when compared to the large quatities of data sent to the Centre; this is due to the fact that the post of documentalist remains vacant.

Centre Bulletin: SPA News

145. Numbers 2 and 3 of the Centre Bulletin were published in July and in December 1988 respectively. An Arabic version of Number 3 was also issued by UNEP, Athens. Two issues have been scheduled for 1989.

Action Plan for the Conservation of the Monk Seal

146. The Action Plan for the conservation of the Mediterranean monk seal was reviewed by the experts and submitted to the Scientific and Technical Committee meeting in 1988. This is a reference plan for the Governments, the Centre and many other organizations as concerns the protection of the monk seal.

Action Plan for the Conservation of Marine Turtles

147. A meeting of Focal Points for Specially Protected Areas and experts from the various countries took place from 4-6 June 1989 at Nicosia (Cyprus). The meeting analyzed the situation and reviewed the provisional version of the Action Plan for the Conservation of the Mediterranean Marine Turtles. The final text of the Plan is submitted to the Contracting Parties.

Legislation

148. Since 1988, a synthesis of environmental legislation of the Mediterranean countries is being carried out. To date, 175 texts have been analyzed and the information entered into a computer. The relevant data are constantly being updated. The next objective (1990) is the preparation of guidelines on legislation needed for the implementation of the Protocol and the creation of marine and coastal Specially Protected Areas.

Underwater Archaelogy

149. A synthesis of the bodies, institutes and researchers active in this field has been completed. A manual containing the methods and equipment needed for underwater archaeology is being completed; furthermore, an overview of the relevant national legislation concerning underwater archaeology is being put together.

Red Book on Marine Plants

150. For the 1988-1989 period, an expert group was formed in order to analyze the current status of marine flora in the Mediterranean and to prepare a red book of endangered marine plants. More specifically, for 1989 an expert group meeting was convened on 12-17 June at Marseille (France); the Red Book in its French version has been scheduled for late 1989.

Marine Turtles - Field Studies - Training Courses

151. A field study on the situation of the marine turtle took place in 1988 in Tunisia. A similar study will take place in July-August 1989 in Algeria and Morocco. On a request by the Turkish authorities, a visit was carried out in the Dalyan area to assess the current situation and propose management measures. A training course on monitoring and management of the reproduction sites of marine turtles will be held in Cyprus between 25 July and 8 August 1989. The Centre will cover the expenses of 4 participants nominated by the States.

Selection of Areas to be protected

152. In September 1988, the Third Expert Meeting on the identification and protection of at least 50 new marine and coastal sites or reserves of Mediterranean interest (Genoa Declaration) was held at Tunis to determine the Areas in need of protection because of their regional and national interest. 55 sites were selected. A document is being prepared which will list the areas selected, those recommended by other specialized groups and those considered by the States.

Assistance to countries - Concerted action - Field studies

153. The assistance to countries for the development of national programmes of environmental protection, for the selection, creation and management of Protected Areas is given upon their request. Activities with Turkey, Syria, Libya, Greece and Malta have been launched. Certain programmes are being carried out in co-operation with other MAP components, as for instance for Syria and Rhodes (Greece) (PAP coastal zone pilot projects) or with other organizations active in the Mediterranean (IUCN-WWF).

154. The joint meeting (Athens, 26-30 June 1989) reviewed the 1990/1991 workplan and budget for the Centre and recommended it for approval by the Contracting Parties. The meeting recommended also that the Coordinating Unit of MAP, in co-operation with the responsible bodies of the country hosting SPA/RAC, sign an agreement between the host country and UNEP on their mutual obligations regarding the Centre.

b) 100 historic sites

155. In implementation of one of the ten targets selected by the Contracting Parties during their Fifth Ordinary Meeting (Genoa, September 1985), relative to the identification and protection of at least 100 coastal historic sites of common interest, and in co-operation with

the Government of France (Ministries of Foreign Affairs, Culture, Environment and the City of Marseille) a meeting of responsible officials from the 100 coastal historic sites of common Mediterranean interest was convened in Marseille, from 19 to 21 January 1989. The meeting discussed, revised and approved the guidelines prepared jointly by PAP/RAC and the Atelier du Patrimoine de la Ville de Marseille. On the basis of the Guidelines and within the network that has now been established, exchange of information, identification and advice on projects, and the search for their financing will be promoted. The meeting was attended by seventy participants from 17 countries, including Albania. The Mayor of Marseille offered to host a small secretariat for the network. A written proposal will be submitted to the meeting of the Contracting Parties (October 1989). The Mayor of Naples and the representative of Thessaloniki offered to host the next two meetings of the network.

156. The joint meeting (Athens, 26-30 June 1989) recommended use of the PAP structure and experience for the development of the new activities, in close co-operation with SPA/RAC and the Coordinating Unit, and expressed appreciation to the authorities in France for the offer of Marseilles to service the network of 100 Mediterranean historic sites.

8. Environmentally sound management of the Mediterranean coastal zone

a) Prospective analysis of the relationship between environment and development

157. The main report of the Blue Plan entitled "Futures of the Mediterranean Basin environment development 2000-2025" has been completed, published in English and French, and presented to the Meeting of the Socio-Economic Committee (Athens, 27-29 September 1988). The executive summary prepared in Arabic, English, and French on the basis of the main report on the Blue Plan has been presented to the Committee. It contains also the suggestions for action made in the main report. It has already received a wide distribution.

158. The Blue Plan scenarios outputs were presented to the public and the mass media in two press conferences. The first was held in Athens in conjunction with the meeting of the Expanded Bureau (1 November 1988). The second press conference was held in Cairo on 20 November 1988 during the ASPEN Conference on the Mediterranean.

159. The RAC/BP President with the help of the editors, took all appropriate measures for the finalization of the English and French versions of the main report with a view to its publication. The text of both versions was totally revised from an editorial point of view, the appropriate clarifications were made, the various parts of the work streamlined and repetitions omitted. Furthermore, all tables and figures were redone for publication. The RAC/BP President has launched a search for an English publisher and a French publisher to ensure a commercial distribution of the Report at world level.

160. Work has progressed on the thematic reports. Their preparation will be completed by end-1989 according to a calendar presented to the Committee. However, the reports on conservation, fisheries, water resources, forests conservation and agriculture, islands and natural hazards were ready for distribution.

161. Updating of the Blue Plan data base is continuing throughout 1989, both on the socio-economic part and the environment part. The representative of Italy confirmed during the joint meeting (Athens, 26-30 June 1989), the offer of a research institution (Genoa Ricerche) to carry out the updating of the Blue Plan data base.

162. In view of the work required to complete publication of the main Report and Executive Summary, and to organize the technical seminar, direct assistance to countries through visits was postponed. Such assistance is being provided on request as part of the 1989 programme.

163. From 5 to 7 October 1988, the Scientific Consultant presented the Blue Plan to the seminar on energy planning in the Mediterranean Basin organized jointly by the EEC and the Tunisian superintendence of Energy at Tunis.

164. From 5 to 7 October 1988, Mr. Michel Grenon organized a seminar on the perspectives of natural gas in the Mediterranean Basin; on the occasion, he made an introductory presentation of Blue Plan activities.

165. On 17 and 18 October 1988, Mr. Michel Batisse participated in a seminar organized by the Aurelio Peccei Foundation at Erice (Sicily) and took part in the discussion on Blue Plan activities held on that occasion.

166. On 14 November 1988, Dr. Mostafa K. Tolba gave Mr. Michel Batisse and Commander Cousteau the insignia of the international environment award "GLOBAL 500" at a ceremony held at UNEP Bureau de l'Industrie headquarters in Paris. The Blue Plan synthesis report was distributed on that occasion.

167. On 19 and 20 January 1989, Mr. Batisse presented the Blue Plan during a meeting on the 100 cultural Mediterranean sites organized at Marseille.

168. On 15 February 1989, Mr. Grenon presented the Blue Plan activities at a meeting of the Environment Commission of the Economic and Social Committee of the Provence - Alpes - Côte-d'Azur region held at Marseille; he also made a similar presentation at a preparatory meeting of the Mediterranean Forum on co-operation in the Mediterranean organized by the Association of Mediterranean Exchanges and on 21 March 1989, gave a lecture to Master's degree students, at the University of Nice on the methodology of prospective and its applications in the Mediterranean Basin.

169. During its meeting in Athens (14-15 March 1989), the Bureau of the Contracting Parties reviewed a new proposal submitted to it by the French vice-president concerning the post-Blue Plan period. The proposal stipulates the establishment of an "Observatory of the Mediterranean", with a small staff and a budget of $ 300,000. It would concentrate on the updating of data, giving priority to the environment of coastal areas, technological changes, training programmes, etc., use it for national and regional scenarios and coastal zone planning project exercise and assist governments at their request. France would submit, at a later stage, an estimate of its contribution to the operation of the observatory, which is still to function under the auspices of the Blue Plan Regional Activity Centre. The Bureau recommended that budget proposals for the 1990/1991 biennium should take into account the estimated expenditure related to the post-BP activities. It also took note of the French Government's undertaking to make a counterpart contribution in the form of the establishment of an observatory at Sophia Antipolis. The joint meeting (Athens, 26-30 June 1989), while approving the programme budget for the 1990/1991 biennium for BP, decided that the detailed terms of reference and the related budget requirements of the post Blue Plan activities should be
discussed by the Committee of the whole during the October 1989 meeting. The meeting also welcomed the offer of France to continue to host and to provide intellectual and financial support for the RAC/BP for the continuance of the forward-looking analytical activities of the Blue Plan.

170. The technical seminar on scenarios methodology and results was held in Sophia Antipolis, France on 22-26 May 1989. The objective was to convene a meeting of nationals who are responsible for the national scenarios with a view to exchanging ideas and experience on national and on Mediterranean scenarios and the methodology of building scenarios. The results of the workshop were presented to the joint meeting (Athens, 26-30 June 1989). The Workshop had shown that many countries were already using the results of the scenarios and others had asked for support of the Blue Plan team, either for drawing up their own national scenarios or for completing their coastal planning projects by long-term perspectives.

b) Coastal Planning and Management

171. The activities of PAP over the period 1988-1989 have been carried out in consistency with the approved workplans of the various Priority Actions.

172. These activities have been focused on the implementation of practical actions oriented towards integrated planning and environmentally sound management of Mediterranean coastal zones. The share of the integrated planning component has gradually increased in the programme while other Priority Actions have been concentrated on the preparation of methodological documents and training geared to the practical application of their results in the process of integrated planning and management of coastal areas.

General

173. While the earlier activities of PAP were oriented towards fact finding and case studies within selected priority topics, in the period 1988-1989 PAP has focused on the following:

- further development and strengthening of PAP network of experts and institutions representing as equitably as possible all Mediterranean countries;

- preparation of methodological documents, guidelines and codes of practice;

- preparation of documents for training courses and organization of training focused on the practical application of knowledge and experience under specific Mediterranean conditions;

- organization of seminars and workshops based on methodological documents and resulting in practical actions;

- preparations for and implentation of co-operative projects in the fields of seismic risk reduction, soil erosion mapping and measurements, and environmentally sound planning and management of Mediterranean aquaculture.

174. In drafting programmes and carrying them out PAP/RAC has strived to accomplish its specific catalytic role and has enjoyed a generous support from a number of country administrations (Italy: Cooperative project on seismic risk reduction; Spain - ICONA; Cooperative project on soil erosion mapping and measurements: Spain - CIOEMAT; Cooperative network on renewable energy sources: Malta; Water resources management project: Cyprus, Egypt and Morocco: preparation of pilot EIAs: France - CEFIGRE: Training course on liquid waste treatment plants operation and maintenance: France - Municipality of Marseille: (a) action on 100 histotic sites of common Mediterranean interest, and (b) preparation of training on environmentally sound approach to planning and design of waste treatment plants for big Mediterranean coastal cities: Syria, Turkey, Yugoslavia and Greece: preparation and implementation of PAP pilot projects). PAP/RAC has also enjoyed full support of OCA/PAC-UNEP in the preparation and implementation of the action addressing EIA issues and in training on the application of ARC/INFO in the planning process.

175. Furthermore, PAP/RAC has sought to secure co-operation and, whenever possible, participation of relevant MAP and UNEP programmes, UN Agencies, and international institutions and organizations. This has enabled the use international knowledge, avoiding of duplication and overlapping of efforts, and rational use of limited funds.

176. The practice of organizing some seminars and workshops outside PAP/RAC offices has continued, owing to encouraging results achieved in the promotion of MAP and PAP activities in the host countries, and to the fact that a large number of local experts have had the opportunity to take part in these seminars and workshops.

177. Consolidation of the Centre has continued. Mention should be made, that the Federal Assembly of Yugoslavia adopted the Law of the Regional Activity Centre for the Priority Actions Programme in January 1989. This legal framework regulates the operation of the Centre and makes possible signing of the agreement between the Government hosting the Centre and UNEP on the Centre's role and function.

178. Difficulties faced in the implementation of the Programme has been the result of the current scarcity of Mediterranean Trust Funds. Therefore, some activites envisaged for 1988 had to be postponed. As the changes had to be reflected on the Project Document a number of revisions have been made weighing additionally upon the small staff of the Centre.

179. Outputs of individual actions have been sorted out, and some of them selected for translation into English/French and Arabic. Many of these outputs have been synthesized, edited and published as MAP Technical Reports Series. A list of PAP documents produced in the period 1985 - March 1989 has been sent to all PAP Focal Points.

Results achieved in Priority Actions

- Integrated Planning and Management of Mediterranean Coastal Zones

180. "Common Methodological Framework for the Process of Integrated Planning and Management of Mediterranean Coastal Areas" was prepared, and presented and discussed in the Meeting in Izmir in June 1988. It was later disseminated and used as the methodological basis for further activities.

181. Training documents on integrated planning were prepared and used for training in PAP CPPs. A training programme was prepared on the use of adequate software and PC hardware in the planning process under the Mediterranean conditions.

182. Preparations were made for the introduction of the integrated planning in the PAP CPPs, and initial studies were made for the potential new CPPs.

- Application of Environmental Impact Assessment in the Development of Mediterranean Coastal Zones

183. In co-operation with OCA/PAC and Med Pol a Practical Approach to the EIA was prepared for the application in the Mediterranean countries, as well as Guidelines for the preparation of EIAs for marinas, touristic complexes, wastewater treatment plants and submarine outfalls. In co-operation with national experts and on the basis of those documents, 2 pilot EIAs were prepared in Cyprus, and an expert meeting was organized for the presentation and evaluation of those EIAs. That meeting also evaluated and amended the Practical Approach and Guidelines.

184. At the moment and on the same basis, three pilot EIAs are in preparation in Morocco, and two in Egypt.

185. In co-operation with and under the guidance of OCA/PAC, an inter-regional meeting on the application of EIA is also being prepared, to be held in November 1989 in Cairo and Alexandria.

- Water Resources Management in Mediterranean Islands and Isolated Coastal Zones

186. In co-operation with institutions of the host-country, the project proposal of Water Resources Management of the Island of Malta was prepared, the outside financial support was secured, the tender for an international competition was prepared, and the technical side of the received offers was analyzed. Within this activity, a special attention was given to the preparation of a general aquifer model for Mediterranean islands, to be used for training purposes.

187. Guidelines on reuse of urban wastewater for agricultural purposes in Mediterranean countries are being prepared in co-operation with FAO and WHO.

188. The preparation of the Manual on Water Resources Management in Mediterranean Islands and Coastal Areas had to be postponed due to the lack of funds.

- Rehabilitation and Reconstruction of Mediterranean Historic Settlements

189. Methodological documents were prepared, and a Workshop on Methodology of Analyzing the Spatial Development of Mediterranean Historic Sites organized. A workshop is in preparation on evaluation and improvement of urban architectural heritage.

190. "Guidelines for the Study, Protection, Planning and Management of Mediterranean Historic Sites" was prepared and presented in the meeting on 100 Historic Sites of Common Mediterranean Interest held in Marseille in January 1989.

191. A draft synthesis of the methodological documents on the preparation of architectural survey, analysis of the actual state, and of spatial development of Mediterranen historic sites was also prepared, to be presented in a workshop in October 1989.

- Land-Use Planning in Earthquake Zones

192. The final version of the Project for Seismic Risk Reduction in the Mediterranean Region was prepared in co-operation with UNDRO and UNDP. The first meeting of the project steering committee was organized in Genoa in April 1988. With the support by the Italian Government and the Municipality, Genoa has become the seat of the project, and its implementation started as a UNDP project. As a part of its contribution to this project, PAP is preparing documents on the implementation of seismic risk mitigation measures in the process of integrated planning.

- Promotion of Soil Protection as an Essential Component of the Environmental Protection in the Mediterranean Coastal Zones

193. This action has been developing as a separate cooperative project hosted by Spain and ICONA (Instituto Nacional para la Conservacion de la Naturaleza, Madrid), in co-operation with ACSAD, FAO and UNEP.

194. In 1988, a number of reports and methodological documents on erosion mapping and measuring was prepared, and presented in the Workshop on the State of Rainfall Erosion (Murcia, November 1988). Two expert meetings were also organized in March 1989, which made the programme for the implementation of the 1st phase of the project (1990-1991), as well as the concept of the 2nd phase (1992-1995). The final version of the project document was reviewed by the Inter-Agency meeting (Split, 3-5 May 1989). Preparatory activities have been started for the selection of pilot areas, and for the organization of a workshop to conclude the preparatory phase of the project (Malaga, November 1989).

- Solid and Liquid Waste Collection, Disposal and Management

195. "Code of Practice for Environmentally Sound Management of Liquid Waste Discharge in the Mediterranean Sea" is being translated in French, while "Guide pratique pour la gestion des déchets solides urbains dans les pays riverains de la Méditerranée" is being translated in English. A workshop to evaluate these documents is being prepared (Split, September 1989).

196. In co-operation with CEFIGRE (France) the documents for the training course on management and maintenance of urban waste treatment plants in the Mediterranean were prepared and the first course on the subject organized in December 1988. The preparations of the second course are under way, including the translation of the documents in French. A course on wastewater reuse is also in preparation (to be held in December 1989 or January 1990).

197. In co-operation with the Municipality of Marseille, a course is in preparation on an environmental approach to planning and design of liquid waste treatment plants for large Mediterranean cities.

- Development of Mediterranean Tourism Harmonized with the Environment

198. An expert meeting for the preparation of draft Guidelines for an Environmental Approach to the Planning and Management of Tourism Development in the Mediterranean Coastal Zones was held in Split in February 1988, specific documents form 6 countries were prepared as well as draft Guidelines. A workshop was held in Split on 29-31 May 1989.

- Environmental Planning and Management of Aquaculture in Mediterranean Conditions

199. A proposal of a cooperative project for this priority action was prepared jointly with FAO and MEDRAP in 1987. Since this project requires considerable outside financial support, it was offered to one of the Contracting Parties for hosting. Although all the possiblle initiatives were made it was not possible, so far, to get a definitive answer on the possibility of supporting this project. Therefore, for the next period, a limited programme is proposed to serve an an input to the process of integrated planning.

- Mediterranean Network in Renewable Sources of Energy

200. This action has been hosted by Spain and CIEMAT (Centro de Investigaciones Energeticas, Medioambientales y Termologicas). The programme and documents of the training course on the practical application of renewable energy sources in the Mediterranean conditions were jointly prepared, and the course organized in Almeria in November-December 1988.

201. The documents are being translated in French and the preparation of the second course (in French and English) is under way. The course is to be held in Madrid and Almeria in November 1989.

202. The document "The Role of Renewable Energy Sources in the Integrated Planning of Mediteerranean Coastal Zones" is also in preparation.

- General Support PAP

203. Within the general support to PAP the necessary logistic and administrative support was secured, as well as temporary assistance to individual priority actions and CPPs, preparation of financial and progress reports, programme and budget proposals, and co-operation with MEDU, other MAP programmes, OCA/PAC, UNEP, UN agencies, international institutions and organizations, and the authorities of the Contracting Parties.

204. A part of the equipment of the Centre was renewed, and a regular preparation and dissemination of the Bulletin in English, French and Arabic was secured.

c) Coastal zones pilot projects

205. Pilot projects constitute a new form of co-operation between PAP/MAP and national and local institutions and experts which is aimed at the creation of favourable conditions for the implementation of the process of integrated planning and management in Mediterranean coastal areas. While being carried out in selected sites in interested Mediterranean countries they address various issues of interest for the majority of Contracting Parties. In addition to host countries, results of these projects will be used in other countries of the region to demonstrate how similar problems can be solved. They will be also used for training and exchange of experience. The pilot projects incorporate the results arrived at in all Priority Actions as well as those of other MAP programmes.

206. The experience obtained in the preparation and carrying out of the pilot projects points at the need for formulating these programmes so as to depart from the specific conditions of the country and the selected coastal zone, from the current level of planning and management practice in the country, and from the capacity and experience of local experts and institutions. Therefore, MAP/PAP pilot projects have been broken down into: (i) preparatory phase (collection of data, information on the state of problems, acquiring knowledge on national and local capabilities, networking, creation of conditions for local and national co-financing, formulation of a consistent programme); (ii) programme implementation (preparation of interim planning documents, immediate recovery proposla, setting up of data base, training of local experts in methodologies, tools and techniques of integrated planning, preparation of EIAs and hazard assessment and risk management studies, preparation of coatal zone scenarios, and preparation of an integrated plan proposal); and (iii) follow up focusing on the management problems and, eventually, launching of the integrated plan.

207. The completed activities envisaged within the projects "The Izmir Bay", "The Syrian Coastal Region" and "The Bay of Kastela" (the "Rhodos" project started later) have yielded results of a general nature as well as concrete ones.

208. The main results of a general nature are:

(i) A number of new national and local activities have been launched within each pilot project; major and the most critical problems have been identified and consistent programmes drafted for their solution.

(ii) Additional local, national and (in the case of Izmir and Kastela) considerable international support has been secured for the implementation of long-term programmes.

(iii) National organizational structures have been set up as well as teams who are entrusted with the coordination and carrying the programmes into effect.

(iv) The existing information basis has been improved and widened to accommodate the programmes.

209. The main concrete results achieved in the pilot projects are:

<u>The Bay of Kastela</u>

210. This PAP project is part of a large-scale national project wherein the solution of problems related to the environmentally sound management of natural resources of the Bay and the surrounding urban area of Split is approached in an integrated manner. PAP contribution to this project consists of the identification of the assimilative capacity of the Bay; incorporation of the engineering and environmental components for the determination of the appopriate waste water treatment system; determination of design criteria for submarine outfalls; and starting off the activities for the creation of a complex outfalls; and starting off the activities for the creation of a complex geographical information system and a dynamic coast inventory.

211. The following have been completed:

- methodology (verified), and the programme and time table of analyses to be made for the assessment of environmental capacity of the Bay;

- programme of monitoring and analyses, and a document on the natural characteristics of the sea water in the Bay and the impacts of waste waters on the marine environment;

- a document which defined ecological criteria for the rational planning and development of aquaculture in the Bay;

- training programme for the preparation of GIS by the use of PC-ARC/INFO software (the first phase of the training has been completed) with the support of UNEP-OCA/PAC;

212. By the end of this year, the programme of monitoring and analysis will be completed, and the assimilative capacity and criteria for discharge of treated waste water will be determined.

The Bay of Izmir

213. The first phase of the project addresses specific problems of the Bay and the improvement of the state of environment in the Bay. The second phase will include the long-term activities of the recovery of the Bay's ecosystem as well as the activities oriented towards integrated planning and management of the Metropolitan Area of Izmir. Such an inductive approach has been adopted because of the acutness of problems Izmir is facing now. Mention should be made that the project prompted many Turkish and some international institutions to join it and to take a concerted action towards its materialization.

214. The following has been completed:

- several on-site reports;

- a document related to the assessment of the state of pollution of the Izmir Bay, based on the reports of several PAP missions;

- a document addressing pressing problems of design related to the system of waste water treatment and effluent discharge into the Bay, as well as to the problems of recovery of the Inner Bay;

- a proposal for the preparation of the Interim Study for the Integrated Plan of the Izmir Area.

215. On the basis of presented PAP documents, the Turkish authorities have developed and started off, in co-operation with MED POL, a programme of additional monitoring and the preparation of a separate oceanographic programme. The results of these programmes together with those of the EIA study should create the basis for the ultimate solution regardng the submarine outfall design as well as for the project "Recovery of the Inner Bay". The recently held policy meeting (Split, March 1989) agreed upon the way of synchronizing all ongoing programmes, and on the creation of a unique national structure supervising the implemnentation of programme activities in the next biennium.

The Syrian Coastal Region

216. This pilot projects has envisaged the preparation of the Preliminary Study to lead to the Integrated Plan of the entire Syrian coast and its immediate hinterland. Acting on the hypothesis that the roots of development and environmental problems of the coast lie in the entire coastal regional system and its functioning, the Study should provide a framework for the projection of the future development of the coastal region based on the environmentally sound managememt of its resources. Being problem-oriented, some of the Study's outputs will be immediately applicable. Furthermore, the Study will contain a detailed programme for the preparation of the Integrated Plan specially bearing upon the environmental dimension of the coastal development.

217. The following has been completed:

- collection of available information and on site reports;

- setting up and work (January-June 1988) of a Syrian-PAP team of planners, with participation of planners and experts from 5 Mediterranean countries;

- training of a Syria-PAP team of planners on the methodology of integrated planning;

- agreement reached on the co-operation of Med Pol and SPA in the preparation of the Preliminary Study, and the documents produced by the two Programmes.

The Island of Rhodes

218. This project has been conceived as a joint effort of all the components of MAP. The principal objectives of the project is to establish the basis for integrated planning and management of the island of Rhodes. The first phase of the project envisages the analysis of sectorial problems which fall into activities of various MAP components. The involvement of PAP is expected in the fields of water resources, liquid and solid waste disposal, seismic risk reduction, rehabilitation of historic settlements, EIA, and integrated planning. The activities of PAP in the second phase, which would be carried out together with local and national experts and institutions, will be oriented towards the application of the integrated planning process.

219. The following has been completed:

- fact-finding mission on the state of problems in the field of (a) water resources management and disposal of waste water; and (b) protection of cultural heritage (June 1988);

- mission to acquire information necessary for the preparation of the study on water resources management;

- mission to Split of an expert from Rhodes dedicated to the historic heritage issues;

- mission on issues relative to waste water treatment plants and submarine outfalls in Rhodes;

- draft programme proposal for the Interim Study of the Integrated Plan for the island.

220. Other envisaged activities are being prepared but they will actually commence after the agreement of MEDU and the Greek Government has been reached.

221. The Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 26-30 June 1989) approved the 1990/1991 programme budget for these four projects and recommended that, for projects under preparation, additional funds should be allocated.

9. Information

222. In order to achieve greater efficiency and economy and a more prominent and consistent identity for MAP, the Bureau of the Contracting Parties decided at its meeting held in Athens, 14-15 March 1989, that all existing information bulletins published by MED Unit and the regional centres (ROCC, PAP,SPA), should be incorporated in a single publication of MEDWAVES to be issued in Arabic, English and French. During the period under consideration, MEDWAVES, (Information Bulletin of the Coordinating Unit) No. 13 and No. 14 were published and distributed in English and French. The last issue was devoted to the Blue Plan results.

223. Press releases and press coverage of MAP were issued on several occasions. The photo library and video cassettes library and catalogue were enlarged. Distribution of information materials in various languages has been carried out.

224. MAP Technical Reports Series No. 14,16,17,26,27,29 and 30 were issued.

225. MEDWAVES (Information Bulletin of the Coordinating Unit) No.10, 11, 12, 13 and 14 were published and distributed.

226. The first Mediterranean Environment Week has been celebrated in a number of Coastal States, in response to the decision of the Bureau designating the week of 4 to 10 July 1988 for this purpose. Initiatives have taken place in Cyprus, France, Greece, Israel, Italy, Libya, Malta, Monaco, Tunisia and Turkey.

227. The second Mediterranean Environment Week was celebrated during 1989 in a number of Coastal States, in response to the decision of the Bureau designating the week of 5 to 11 June 1989 for this purpose.

228. The MAP Exhibition was shown in Malta from 1 to 15 July 1988 at the initiative of the Maltest authorities on the occasion of the Mediterranean Environmental Week, and in Libya in three cities (Raslanuf, Benghazi and Tripoli) on the occasion of the convening of the International Seminar on the combating of pollution and the conservation of marine resources in the Mediterranean (Raslanuf, 5-8 June 1989) and the Mediterranean Environment Week.

229. On 26 July 1988 the Coordinator attended a meeting with the press accredited to the United Nations in Geneva and answered questions concerning the Mediterranean Action Plan. Several major new agencies (Associated Press, Reuters, Agence France Presse, EFE (Spain), ANSA (Italy), DPA (FRG), Agence Télégraphique Suisse and several national newspapers covered the issue.

B. Financial matters

Financial Matters

230. The 1987-1988 biennium has been characterized by late payment of contributions that have delayed activities and created uncertainties for all programme components. As of 31 December 1988, $ 2,156,559 had been paid into the Trust Fund, leaving an unpaid balance of $ 3,635,774.

231. This far exceeds the estimate of $ 600,000 in unpaid contributions included in the cash flow approved by the meeting of Contracting Parties (UNEP/IG.74/3, Annex VI) and shows that the recommendation made by previous meetings that contributions should be paid by 30 April of each year is not been followed.

232. The crisis has demonstrated an inherent weakness of the financing system of the Action Plan. Whereas activities are continuous and the established unit and centres require a continuity of funding, the flow of resources is unpredictable and no pattern has emerged over the years to guarantee the timely availability of funds.

233. It is important to recall that the procedures governing all United Nations Trust Fund do not easily accommodate themselves to this stop-go situation. Each new amount received needs to be processed through a complex project revision procedure for each of the seven projects through which the activities approved under the Mediterranean Action Plan are carried out. UNEP can only authorize those activities to be started for which full funding is available in the MTF and only to the extent of such availability. No cash advances are possible from any sources and no borrowing is allowed on contributions pledged by Governments. Non-availability of funds automatically results in non-renewal of contracts and stoppage of activities.

234. When considering the situation, the Bureau (Athens, 31 October 1988) did not accept the secretariat's proposal on the establishment of a small high-level Working Party, or Committee of Wise Men, to devise a solution to this inherent weakness in the MAP structure, ensuring that funds are available when required, i.e. not later than 30 April of each year and in the full amount pledged. Nevertheless, it urged all Contracting Parties to pay their contributions not later than the first quarter of each year.

235. The Bureau (Athens, 14-15 March 1989) again urged all Contracting Parties to pay their contributions not later than the first quarter of each year. It also recommended that any funds received in excess of the approved programme should constitute a reserve on which the secretariat would be able to draw for carrying out the approved programme. Any additional expenditure from such a reserve to deal with emergency situations would require the approval of the Bureau.

236. The Bureau agreed that a 5% adjustment of the budget to take account of inflation should be reflected in the 1990-1991 proposed budget, subject to the reservation expressed by the French Vice-President regarding the customary justification.

237. The status of contributions to the MTF as at 31 July 1989 is contained in Annex II to this report.

Project approval procedure

238. In response to various requests from this office concerning the need for a simplified procedure for the approval of project revisions of a purely financial nature involving no change in project objectives or outputs, it was proposed by UNEP HQ that:

- the presently ongoing seven MED projects should be extended until 31 December 1989;

- by 1 September 1989, a new internal project, covering all MAP activities for the period 1 January 1990 - 31 December 1991, should be submitted by MEDU to the Headquarters for comments; disbursement of funds for activities to be handled by subsidiary units of MEDU (e.g. PAP/RAC, ROCC, SPA/RAC) or agencies (e.g. FAO, IAEA, WHO, WMO, IOC) should be accomplished by subprojects under the main project or by memoranda of understanding or subcontracts between MEDU and these units or agencies;

- in light of Headquarters' comments and the decisions of the forthcoming meeting of the Contracting Parties, the proposal should be revised by MEDU and should reach the Headquarters not later than 31 October 1989);

- the terminal reports, the final financial statements and evaluation fact sheets, together with final list of inventory of non-expendable equipment and recommendation for disposal (where applicable), of all presently ongoing MAP projects should be received at Headquarters by 1 March 1990, in order to allow the closing of those projects.

239. It is hoped that these arrangements will:

- strengthen the co-ordinating function of MAP by MEDU and its control over the implementation of MAP's programme and use of the available funds;

- simplify the administrative procedures of the Headquarters in approving and revising the project document supporting all MAP activities, and

- provide a higher degree of responsibility and flexibility for MEDU to manage the programme and funds relevant to MAP.

ANNEX I

STATUS OF SIGNATURES AND RATIFICATIONS OF THE CONVENTION FOR THE PROTECTION OF THE MEDITERRANEAN SEA AGAINST POLLUTION AND ITS RELATED PROTOCOLS

Status as at 31 July 1989

	Convention(1)		Dumping(2)		Emergency(3)		Land-Based Sources(4)		Specially Protected Areas(5)	
	Signature	Ratification	Signature	Ratification	Signature	Ratification	Signature	Ratification	Signature	Ratification
Albania	--	--	--	--	--	--	--	--	--	--
Algeria	--	16 Feb 81/AC	--	16 Mar 81/AC	--	16 Mar 81/AC	--	2 May 83/AC	--	16 May 85/AC
Cyprus	16 Feb 76	19 Nov 79	16 Feb 76	19 Nov 79	16 Feb 76	19 Nov 79	17 May 80	28 Jun 88/AC	--	28 Jun 88/AC
Egypt	16 Feb 76	24 Aug 78/AP	16 Feb 76	24 Aug 78/AP	16 Feb 76	24 Aug 78/AP	--	18 May 83/AC	16 Feb 83	8 Jul 83
France	16 Feb 76	11 Mar 78/AP-R	16 Feb 76	11 Mar 78/AP-R	16 Feb 76	11 Mar 78/AP-R	17 May 80	13 Jul 82/AP-R	3 Apr 82	2 Sep 86/AP-R
Greece	16 Feb 76	3 Jan 79	11 Feb 77	3 Jan 79	16 Feb 76	3 Jan 79	17 May 80	26 Jan 87	3 Apr 82	26 Jan 87
Israel	16 Feb 76	3 Mar 78	16 Feb 76	1 Mar 84	16 Feb 76	3 Mar 78	17 May 80	--	3 Apr 82	28 Oct 87
Italy	16 Feb 76	3 Feb 79	16 Feb 76	3 Feb 79	16 Feb 76	3 Feb 79	17 May 80	4 Jul 85	3 Apr 82	4 Jul 85
Lebanon	16 Feb 76	8 Nov 77/AC	16 Feb 76	8 Nov 77/AC	16 Feb 76	8 Nov 77/AC	17 May 80	--	--	--
Libya	31 Jan 77	31 Jan 79	31 Jan 77	31 Jan 79	31 Jan 77	31 Jan 79	17 May 80	--	--	--
Malta	16 Feb 76	30 Dec 77	16 Feb 76	30 Dec 77	16 Feb 76	30 Dec 77	17 May 80	--	3 Apr 82	11 Jan 88
Monaco	16 Feb 76	20 Sep 77	16 Feb 76	20 Sep 77	16 Feb 76	20 Sep 77	17 May 80	12 Jan 83	3 Apr 82	29 May 89/R
Morocco	16 Feb 76	15 Jan 80	16 Feb 76	15 Jan 80	16 Feb 76	15 Jan 80	17 May 80	9 Feb 87	2 Apr 83	--
Spain	16 Feb 76	1/ Dec 76	16 Feb 76	17 Dec 76	16 Feb 76	17 Dec 76	17 May 80	6 Jun 84	3 Apr 82	22 Dec 87
Syria	--	26 Dec 78/AC-R	--	26 Dec 78/AC	--	26 Dec 78/AC	--	--	--	--
Tunisia	25 May 76	30 Jul 77	25 May 76	30 Jul 77	25 May 76	30 Jul 77	17 May 80	29 Oct 81	3 Apr 82	26 May 83/R
Turkey	16 Feb 76	6 Apr 81	16 Feb 76	6 Apr 81	16 Feb 76	6 Apr 81	--	21 Feb 83/AC	--	6 Nov 86/AC-R
Yugoslavia	15 Sep 76	13 Jan 78	15 Sep 76	13 Jan 78	15 Sep 76	13 Jan 78	--	--	30 Mar 83	21 Feb 86
EEC	13 Sep 76	16 Mar 78/AP	13 Sep 76	16 Mar 78/AP	13 Sep 76	12 Aug 81/AP	17 May 80	7 Oct 83/AP	30 Mar 83	30 Jun 84/AP

1- Convention for the protection of the Mediterranean sea against pollution
   Adopted (Barcelona): 16 February 1976
   Entry into force: 12 February 1978

2- The Protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft
   Adopted (Barcelona): 16 February 1976
   Entry into force: 12 February 1978

3- The Protocol concerning co-operation in combating pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency
   Adopted (Barcelona): 16 February 1976
   Entry into force: 12 February 1978

4- The Protocol for the protection of the Mediterranean Sea against pollution from land-based sources
   Adopted (Athens): 17 May 1980
   Entry into force: 17 June 1983

5- The Protocol concerning Mediterranean Specially Protected Areas
   Adopted (Geneva): 3 April 1982
   Entry into force: 23 March 1986

Accession : AC
Approval : AP
Reservation: R

ANNEX II

Regional Trust Fund
for the Protection of the Mediterranean Sea Against Pollution
Status of Contributions as at 31 July 1989
(in United States Dollars)

COUNTRIES	Unpaid pledges as at 31 Dec. 1988	Adjustments for prior years	Pledges for 1989	Pledges for 1990	Collections during 1989 for prior years	Collections in 1989 for 1989 & future years	Unpaid pledges for 1989 and prior years	Unpaid Pledges for 1990
Algeria	28,613.98	-	30,044.68	-	26,316.00	-	32,342.66	-
Cyprus	-	-	4,955.82	-	-	-	4,955.82	-
Egypt	-	-	22,920.69	-	-	-	22,920.69	-
France	560,627.55	-	1,177,317.94	-	560,627.55	-	1,177,317.94	-
Greece	-	-	123,895.60	-	-	-	123,895.60	-
Israel	131,170.44	-	75,576.32	-	59,193.00	-	147,553.76	-
Italy	802,371.44	-	842,490.08	-	-	-	1,644,861.52	-
Lebanon	21,255.90	-	3,097.39	-	-	-	24,353.29	-
Libyan Arab Jamahiriya	47,063.00	-	61,947.80	-	-	-	109,010.80	-
Malta	2,949.90	-	3,097.39	-	-	-	6,047.29	-
Monaco	-	-	3,407.13	-	-	-	3,407.13	-
Morocco	-	-	16,416.17	-	-	-	16,416.17	-
Spain	-	-	464,608.50	-	-	-	464,608.50	-
Syrian Arab Republic	3,762.66	-	9,911.65	-	-	-	13,674.31	-
Tunisia	-	-	9,911.65	-	-	-	9,911.65	-
Turkey	122,158.00	-	123,895.60	-	-	-	246,053.60	-
Yugoslavia	122,866.80	-	123,895.60	-	122,866.80	2,133.20	121,762.40	-
European Economic Community	80,097.95	-	670,047.60	-	80,097.95	670,047.60	-	-
Total	1,922,937.62	-	3,767,437.61	-	849,101.30	672,180.60	4,169,093.30	

Total collections during 1989 as at 31 July 1989 US $ 1,521,281.90