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MEDITERRANEAN ACTION PLAN

Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee

Athens, 28 May - 1 June 1990

PROGRESS REPORT ON THE IMPLEMENTATION OF THE MEDITERRANEAN ACTION PLAN

(October 1989 - March 1990)

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1. Background

The Sixth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Athens, 3-6 October 1989) decided to convene every year, on the same dates, the Scientific and Technical Committee and the Socio-Economic Committee to review both separately and together the progress of the Action Plan and to prepare the decisions of the Contracting Parties. In view of the fact that the present meeting will not have to discuss the programme and budget for the next biennium, it has been decided to convene a joint meeting of the two committees this year. However, the agenda will permit a clear distinction between the subjects falling within the responsibility of each Committee, so that individual experts may attend sessions as appropriate.

2. <u>Introduction</u>

The present progress report describes in summary activities that were carried out since the last meeting of the Contracting Parties (Athens, 3-6 October 1989). Comments and factual corrections on the progress report should be transmitted to the Secretariat at the beginning of the meeting.

3. Financial matters

- 1. Contrary to the critical financial situation of the 1988/1989 biennium, the 1990 has witnessed an improvement in the payment of contributions to the Mediterranean Trust Fund (MTF). Italy paid its arrears for 1988/1989 after strong pressure from the Deputy Foreign Minister and Vice-President of the Bureau of the Contracting Parties. Total collections during 1990 as at 31 January 1990 amounted to US \$ 1,700,692. However, as up to 1 April 1990, no Contracting Party has paid its 1990 contribution. It is hoped that in order not to be faced with the same situation of the last biennium, Contracting Parties should adhere to the various requests made by Ordinary Meetings and the Bureau to the effect that contributions should be paid by 30 April of each year.
- 2. The status of contributions to the MIF as at 31 March 1990 is contained in Annex I of this report.

4. Administrative matters

1. As it was mentioned in the progress report submitted to the last meeting of the Contracting Parties, the new simplified procedure for the approval of project revisions was agreed upon. The new system implied the termination of the seven MED projects by 31 December 1989 and a new internal project, covering all MAP activities for the period 1 January 1990-31 December 1991 was approved accordingly. Disbursement of funds for activities to be handled by Regional Centres of MEDU (e.g. PAP/RAC, BP/RAC, SPA/RAC) or agencies (e.g. IMO, FAO, IAEA, WHO, WMO, IOC) was accomplished by memoranda of understanding under the main project between MEDU and these Centres or agencies;

- 2. These new 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.

5. Activities

- 5.1 <u>Programme management and co-ordination of the Mediterranean Action Plan</u>
 - (a) Programme approval through decision-making meetings
- 1. In pursuance to decision E.9.4 of the Sixth meeting of the Contracting Parties (Athens, October 1989), an informal consultation on the "Adriatic Initiative" was convened by the Secretariat in Athens on 18-20 December 1989. Representatives from Albania, Greece, Italy, Yugoslavia and the EEC attended the meeting. Two main documents prepared by the Secretariat were thoroughly discussed one on "Adriatic Sea: Overview of the work within the frame of the Mediterranean Action Plan", and the second on "Programme of implementation of the Adriatic Initiative in the context of the Mediterranean Action Plan 1989-1995". The proposed programme of the Adriatic Initiative and the timetable for its implementation were amended and adopted.

The meeting also suggested that the Adriatic Initiative might require a co-ordinating mechanism. The Co-ordinator informed the meeting that certain activities were already included in the MAP workplan and budget for 1990 and 1991 and will be carried out as a contribution of MAP to the Adriatic Initiative. It was up to the four countries concerned, and of Italy in particular, to invite the Unit's participation in future developments. Any further involvement, especially if staff time and budgetary implication were involved, could not be undertaken without first consulting the Bureau. In any case, as the proposed programme was a complex and extensive one, the Unit could not be expected to play a central co-ordinating role for its execution. Furthermore, he expressed the hope that funds will be made available to finance its most urgent components.

The report of the Meeting is contained in document: UNEP(OCA)/MED WG.10/4.

2. During the meeting in Cairo (February 1990), the Bureau of the Contracting Parties agreed on the usefulness of the action taken to extend the "Adriatic Initiative" to Albania and Greece through bilateral and other contacts and invited UNEP to continue its supporting role to the initiative on the technical and scientific level and also on the organizational and financial level.

3. A review meeting on the NGO project was convened in Marseille on 17 October 1989 with the team from the University of Aix-Marseille together with France, who co-finances the project, the President of EEB and representatives of two NGOs (Europa Nostra and Regional Association for Environment Protection of South-East France).

The meeting agreed on the future development of the project: translation of the basic paper into English, meeting of a planning group of some 12 major NGOs on 2 and 3 May 1990 to determine the precise structure of the Forum of NGOs. France agreed to finance the planning group, but funding for the Forum remains to be secured.

4. A consultation was held in Genoa on 18 October 1989 with the Commission for the celebration of the 500th Anniversary of the Discovery of America (Colombiane) in 1992.

An Exhibition during this occasion is expected to attract national and international exhibits. The UN, UNESCO and IMO have confirmed their attendance. The Commission has a fund of \$ 250 million. The list of meetings must be approved by a scientific committee that is still being constituted. Interest was expressed for two subjects that could be linked with Genoa, MAP and the Sea:

- A. A meeting (possible late 1991) of Mediterranean, Caribbean, and Latin American regional seas in order to compare their policies and achievements. This was proposed by Prof. Fierro, Italian focal point for PAP, as an occasion for inviting to Genoa, experts from Latin American countries.
- B. An international symposium on carcinogenic, teratogenic and mutagenic substances in the marine environment. The substances from the IBS/List are due for assessment and proposed measures in the year 1990. Prof. Santi, as Chairman of the Italian Society against Cancer, is confident he can obtain Italian and WHO (Geneva and IARC) support to set up a permanent research centre on this subject. He offered to draft a project outline taking into account MAP timetable and requirements, to be submitted to the Columbus'92 scientific committee.
- 5. The second meeting of the Directors of the Regional Activity Centres (RAC) was convened in Athens from 17 to 19 January 1990. The purpose of the meeting was to exchange views on how to implement the decisions of the last meeting of the Contracting Parties and to agree on Workplan and Timetable for the 1990/1991 biennium. The report of the meeting is contained in document UNEP(OCA)/MED WG.13/2.
- 6. The new Bureau of the Contracting Parties convened in Cairo, from 19 to 20 February 1990. The meeting was chaired by H.E. Mr. A. Ebeid, Minister of Cabinet Affairs, Minister of State for Administrative Development, and Minister in charge of the Environment of Egypt. The meeting reviewed progress achieved since the last meeting of the Contracting Parties. The report of the meeting is contained in document UNEP/BUR/36/4.

(b) Programme Co-ordination

- 1. During the Sixth Ordinary Meeting of the Contracting Parties (Athens, October 1989), the Italian delegation expressed its opinion of the need to extend co-ordination of MAP activities to adjoining maritime basins, and especially to the Black Sea. The issue was raised once again during the Bureau meeting (Cairo, February 1990), during which the Bureau thanked the Vice-President from Italy for the information provided and agreed on the usefulness of the action undertaken. It invited the two Vice-Presidents to continue exploratory contacts to determine the prospects of a closer co-operation in the environmental field at the regional and sub-regional levels.
- 2. A Seminar on the protection of coastal areas in the European Community (Marseille, 16-18 October 1989) was organized by the French presidency of the EEC. The Seminar was attended by two officials designated by each country, one representing environment, the other regional planning. UNEP(MAP), UNESCO(MAB), the Oslo and Paris Commission, OECD, and eight NGOs were also invited. The presence of Minister Brice Ialonde on the second day shows the importance France attached to this consultation. He addressed the meeting and hosted a dinner, with the Mayor of Marseille, Mr. Vigouroux.

The Country reviews were extremely frank and useful and showed the basic difference between the North and South (i.e. Mediterranean) coasts of Europe. In the North policies for coastal management work, in the South they are largely circumvented. There was general agreement on the value of the National Trust/Conservatoire du Littoral approach, on the dangers of full decentralization especially when vast projects financed with EEC structural funds are supervised solely by local authorities.

The Minister also chose to introduce the volume just published by France entitled "The Contribution of France to the protection of the Mediterranean" as an example of what other countries might do. The EEC official for the first time offered to conduct a co-ordination meeting with MAP after the adoption of their MEDSPA programme.

- 3. A meeting was organized by the Grand Orient de France on The Mediterranean Basin in the XXI Century (Nice, 30 November 2 December 1989). The subject of discussion was the co-existence of cultures. The Co-ordinator delivered a lecture of the UNEP's efforts to develop links between coastal States on subjects of common interest, namely environmental protection and management of coastal areas.
- 4. The World Bank workshop on the Environment programme for the Mediterranean was convened in Paris on 7 and 8 December 1989. Phase one of the Environmental programme for the Mediterranean (EPM) sponsored by the World Bank and the European Investment Bank was presented to the participants from 14 Mediterranean coastal states and the EEC. The meeting accepted the report of the Bank, subject to a number of factual corrections that were requested. H.E. Mr. A. Ebeid, President of the Bureau, delivered a keynote statement.

The Co-ordinator of MAP confirmed UNEP's wish to continue to cooperate closely with the World Bank as foreseen by the letter of understanding signed by the Executive Director of UNEP and Mr. Thalwitz, Vice-President for Europe, Middle East and North Africa of the Bank on 12 July 1989. The latter acknowledged the open support provided by UNEP and pledged that the Bank would continue to work handin-hand with UNEP on the Mediterranean.

5. The ASPEN Institute Italia, organized a meeting in Marseille on 10-12 December 1989 on "A Medium Term Strategy for Mediterranean Cooperation". The meeting was convened by the Italian Minister of Foreign Affairs in his capacity as President of ASPEN Italia. The meeting was co-chaired by Mr. Edgar Pisani, President of the Institut du Monde Arabe, Paris, and by Mr. S. Berlinguer, Secretary General of the Presidency of the Republic, Rome. It reviewed Mediterranean cooperation in the light of developments in Eastern Europe that are perceived by the Arab countries as a threat to traditional North-South relations. Mr. De Michelis proposed a 1% target of GNP for EEC countries' foreign aid (25% for Eastern Europe, 25% for Mediterranean partners, 50% rest of the world), i.e. a doubling of resources, taking advantage of the economic boom expected from the 1992 single market. The meeting adopted a final declaration. It recommends inter alia "to support the Mediterranean plan of Action, and in particular the Blue Plan, and is convinced that the present level of funding is largely inadequate to cope with the gravity of the issues at stake".

The Minister convened a consultation among eight institutions and organizations present at the meeting and proposed a better exchange of information on their respective programmes. ASPEN Italia offered to service the exchange. The Co-ordinator of MAP was invited to participate in the meeting. MAP experience, including refocusing, coastal pilot projects, the participation of the World Bank and EIB were presented by the Co-ordinator.

(c) Legal Component

- 1. As concerns decision (A.3.3) of the Sixth Ordinary Meeting of the Contracting Parties (Athens, 3-6 October 1989), relative to the draft protocol on Exploration and Exploitation of the Continental shelf and the Sea-bed land its sub-soil (offshore protocol) invitations to the meeting of the Working Group of Experts scheduled to be convened in Athens from 7 to 11 May 1990 were sent to all Contracting Parties and relevant organizations. The draft protocol with the comments received from the Contracting parties will be reviewed and finalized by the Working Group. On the basis of progress achieved, a decision will be taken by the Bureau on the time and place of the Conference of Plenipotentiaries to consider the draft protocol.
- 2. A Consultation with IMO took place on 4-5 December 1989, during which various topics were raised:

- a) On transboundary movements of toxic wastes (Decision of the last meeting of the Contracting Parties), IMO considers that it will be difficult to obtain significant data. It suggests that MEDU should approach the International Maritime Bureau of the International Chamber of Commerce.
- b) Concerning the Contracting Parties decision (A.3.4) on follow-up on the ships' garbage, IMO provided this office with the guidelines on Annex V to MARPOL and invited MAP to take the initiative of a regional survey, along the lines of that carried out by the Baltic Commission. The International Chamber of Shipping (ICS) in London may be a source of relevant data.
- c) As concerns decision (A.3.6 and 8) on the Dumping Protocol, IMO confirmed that the London Dumping Protocol is pursuing the goal of changing its role and obtain a wider mandate to deal with disposal of wastes in general. However, this may create some conflict with the role of other organizations, and, in the Mediterranean, with the Barcelona Convention.
- 3. The Status of Signatures and Ratifications of the Convention and its related protocols as at 31 March 1990 appears in Annex II to this report.
 - 5.2. <u>Implementation of the Land-Based Sources Protocol (LBS) and</u> the Dumping Protocol
 - a) Implementation of the LBS Protocol and the Dumping Protocol
- 1. The Protocol for the Protection of the Mediterranean Sea against Pollution from land-based sources was ratified by Malta on 2 March 1989 and approved by Libyan Arab Jamahirya on 6 June 1989, bringing to fourteen the total number of Contracting Parties who have ratified, acceded or approved the Protocol.
- 2. Information was received from a number of Contracting Parties on their existing national legislations related to the requirements of the IBS Protocol.
- 3. No information was received from Contracting Parties on new regulations related to the enforcement of Environmental Quality Criteria or Emission Standards adopted.
- 4. 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.
- 5. With respect to the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft, the Secretariat received no information on the designation of "competent authorities" from Contracting Parties following the Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (Athens, 26-30 June 1989).

- 6. The secretariat received no information from Contracting Parties on experts and institutions capable of providing technical assistance on matters of dumping of wastes at sea and on alternative methods for waste disposal following the Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee.
- 7. During 1990 the secretariat received France's annual report on dumping activities for the year 1988 and Israel's annual report on dumping activities for the year 1989.

Implementation of LBS workplan activities

- 1. The final versions of the questionnaires for the survey of pollutants from land-based sources were submitted to countries in June 1989, and preparations commenced for expert visits to assist in their completion.
- 2. The results of the pilot project on selected submarine outfalls were reviewed by a small WHO/UNEP expert group, which met in Madrid from 3 to 5 July 1989 (WHO Ref. ICP/CEH 085). The meeting approved the outline content of the guidelines for submarine outfalls in the Mediterranean, together with their scope and rationale. The first draft of these guidelines was reviewed by the WHO/UNEP Consultation on programmes and measures for the protection of the Mediterranean Sea against pollution from land-based sources (Alexandria, 5-9 November 1989), which was attended by 18 participants from 10 Mediterranean countries (WHO Ref. ICP/CEH 082). Arrangements for preparation of the revised version were initiated.
- 3. The first draft of the guidelines for treatment of effluents containing Annex I substances and the revised draft of the guidelines for authorization for the discharge of liquid wastes into the Mediterranean Sea were comprehensively reviewed by a small WHO/UNEP expert group which met in Athens from 22 to 24 June 1989 (WHO Ref. ICP/CEH 065). Revised versions of both documents were further reviewed by the November 1989 Alexandria consultation. Preparation of the final version of both documents on the lines of the consultation's recommendations was initiated in early 1990.
- 4. Work was commenced on the preparation of the document on assessment of the state of pollution of the Mediterranean Sea by pathogenic microorganisms, the first draft of which is scheduled for review by a small expert group in late 1990.
- 5. Work was also commenced on the preparation of the assessment of the state of pollution of the Mediterranean Sea by carcinogenic/teratogenic/mutagenic substances, the first draft of which is scheduled for review in early 1991. This work is being performed in close collaboration between WHO Headquarters, who are currently preparing a document dealing with the subject at global level for GESAMP.

6. A draft Annex IV to the IBS Protocol determining the applicability of the Protocol to the airborne pollution was prepared by a consultant in co-operation with WMO and is submitted to the present Joint Committees' meeting as document UNEP(OCA)/MED WG. 12/5.

Pilot monitoring surveys

- 1. The pilot project on <u>monitoring of carcinogenic</u>, <u>teratogenic</u> and <u>mutagenic marine pollutants</u> in selected "hot-spot" localities commenced in late 1989 with the participation of 3 institutions from Italy, 1 from Spain and 1 from Yugoslavia. The results of a number of research projects are also expected to contribute to this activity.
- 2. Preparations were commenced on the organization of the pilot project on monitoring detergents, which is scheduled to start in late 1990.
- 3. A small meeting was held in Haifa in June 1989 to review the results of the <u>pilot survey on persistent synthetic materials</u>. Most of the data collected were on beach litter; some data on sea bottom litter and floating litter were also collected. The conclusions of the meeting were the following:
 - a) Plastic material constitutes the most dominant component of the marine and coastal litter (in most of the cases 65-75%) and can be attributed to its wider use. Its origin could be land or marine-based and should therefore be considered as the prime target in the combat against marine litter.
 - b) On the basis of the original use of plastic containers, before they were discarded as garbage, and the imprints and inscriptions on these containers, it is possible to tell whether they are land- or marine- based litter.
 - c) On the basis of the garbage composition, the impression of the majority of the participants in the exercise was that most of the coastal garbage in the Mediterranean is land-based. If this impression is proved to be true by future investigations, then the Mediterranean coastal litter is different from that found on the shores of the east Atlantic, which is mostly marine-based litter.
 - d) The litter quantity is greatly dependent on the human activity on the beach. The closer a beach is to a population centre, the more polluted it is. Wind is another factor which should be taken into consideration.
 - e) Storm waves drive the litter to the back of the beach and sometimes even landward beyond the beach. This process causes a reduction of litter quantity on the beach during the winter. In many Mediterranean beaches, recreation activity during the summer causes an increase of coastal litter. These two processes determine the seasonal changes in the garbage quantity on the beach.

The results of the survey are being used in the preparation of the assessment document on persistent synthetic material.

Pollution assessment documents and Environmental Quality Criteria

- 1. Since the last Joint Meeting (June 1989), recommendations concerning common measures against pollution by used lubricating oils, cadmium and cadmium compounds, organotin compounds and organohalogen compounds were adopted by the Contracting Parties at their sixth Ordinary Meeting held in Athens in October 1989 (UNEP(OCA)/MED IG. 1/5).
- 2. The assessment document on the state of pollution in the Mediterranean Sea by Organophosphorus compounds including proposed measures was finalized and it is presented to the present meeting as document UNEP(OCA)/MED WG. 12/4.
- 3. The first draft of the assessment of the state of pollution in the Mediterranean by radioactive substances and proposed measures is being prepared by a consultant and it will be ready and sent to all Contracting Parties by the end of 1990.
- 4. The first draft of the assessment of the state of pollution of the Mediterranean Sea by pathogenic organisms is being prepared and it will be reviewed by a small expert group in late 1990.
- 5. Work also commenced on the preparation of the assessment of the state of pollution of the Mediterranean Sea by carcinogenic/teratogenic/mutagenic substances. The first draft of the document is scheduled to be reviewed in early 1991 and it will take into consideration the results of the pilot project started in late 1989.
- 6. The first draft of the assessment of the state of pollution of the Mediterranean Sea by persistent synthetic material is being finalized by using the results of the pilot survey as well as the conclusions of the review meeting held in Haifa in June 1989. The document will be ready by the end of 1990 and will be then circulated to all Contracting Parties.
- 7. Work was also initiated on the preparation of the assessment of the state of pollution of the Mediterranean Sea by the elements listed in item 1 of annex II of the LBS protocol.

Research and study topics

1. During 1989, a total of 137 projects were ongoing and 39 were completed with a total expenditure of US\$ 286,000. Under this chapter, only the research activities more immediately linked to the implementation of the IBS Protocol are considered. Other activities are covered in chapter 5.3 a).

Activity B.

Projects completed in 1989 - 1
Projects ongoing on 31 December 1989 - Nil
1989 contribution - Nil

The project completed under this activity dealt with the development of approaches for the continuous assessment of pollutant loads.

Activity C

Projects completed in 1989 - 2
Projects ongoing on 31 December 1989 - 4

1989 contribution - US\$ 7,000

Both completed and ongoing projects dealt with various aspects of intercomparison of techniques for monitoring coastal recreational and shellfish waters in relation to the development of environmental quality criteria.

Activity D

Projects completed in 1989 - 5
Projects ongoing on 31 December 1989 - 15

1989 contribution - US\$ 39,000

Projects dealt with two distinct fields: (a) health effects associated with microbiologically-contaminated coastal seawater or shellfish, and (b) health effects associated with chemically-contaminated seafood. A number of projects under this activity were also supported by considerable grants from local and regional authorities (following recommendations by WHO) in addition to the catalytic MED POL assistance.

The ongoing epidemiological studies being performed as part of this activity were reviewed during a consultation meeting held in Malta from 13 to 16 December 1989 (WHO Ref. ICP/CEH 083).

Activity E

Projects completed in 1989 - Nil
Projects ongoing on 31 December 1989 - 4
1989 contribution - Nil

The four ongoing projects in this activity, all of which are expected to be completed in 1990, deal with submarine outfall design, used lubrication oils in effluents, health-related environmental impact assessment of selected developmental projects, and coastal pollution by solid wastes.

Activity G

Projects completed in 1989 - 9
Projects ongoing on 31 December 1989 - 29

1989 contribution - US\$ 56,000

- 2. Both completed and ongoing projects cover a fairly wide range of topics in the following fields: (a) the relationship between levels and effects of selected substances vis-a-vis man and marine biota, (b) environmental factors affecting carcinogenicity/mutagenicity of selected substances, (c) study of toxicity effects of copper, zinc, lead, chromium, cadmium and selenium on various marine organisms, (d) study of bioprotection mechanisms in organisms, (e) bioaccumulation of organotins, cadmium, mercury, cadmium and organophosphorus compounds in marine organisms, (f) in situ toxicity of oil dispersants, (g) effect of carbonate and organophosphorus pesticides on marine invertebrates and (h) metallothioneins.
- b) Assessment of the state of pollution in the Mediterranean Sea by Organophosphorus compounds and proposed measures

Under this subject (agenda item 5.2. b) a separate document is submitted to the meeting as document UNEP(OCA)/MED WG. 12/4.

c) Draft annex IV (airborne pollution) of the LBS Protocol

Under this subject (agenda item 5.2. c) a separate document is submitted to the meeting as document UNEP(OCA)/MED WG. 12/5.

- 5.3. Monitoring of Marine Pollution in the Mediterranean
- a) Monitoring of Marine Pollution through MED POL

National Monitoring Programmes

- 1. By the end of January 1990 ten national Monitoring Programmes relative to the year 1989 had been finalized with Algeria, Cyprus, Egypt, Greece, Israel, Iebanon, Malta, Syria, Tunisia and Yugoslavia. The national coordinators of France, Monaco, Spain and Italy informed that, although a formal 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. Between January 1989 and March 1990 monitoring data were submitted to the Unit by Algeria, Cyprus, Egypt, Greece, Israel, Italy, Lebanon, Malta, Morocco, Syria and Yugoslavia.
- 2. During 1989 the secretariat, directly or indirectly through the Cooperating Agencies, provided assistance either in cash or in equipment and material to the countries who had finalized the monitoring agreement for a total of US\$ 372,390. The monitoring assistance was distributed as follows: Algeria: 35,000 US\$, Cyprus: 31,400 US\$, Egypt: 60,000 US\$, Greece: 10,185 US\$, Israel: 55,000 US\$, Lebanon: 25,000 US\$, Malta: 22,470 US\$, Syria: 26,500 US\$, Tunisia: 44,000 US\$ and Yugoslavia: 62,835 US\$. In many cases, the above figures represent only funds committed, which may bring minor changes when final invoices are paid.

- 3. As to activities related to the monitoring of the transport of pollution through the atmosphere, in 1989 three countries (Cyprus, Israel and Yugoslavia) included this type of monitoring into their national monitoring agreements and a number of countries (e.g. Malta, Tunisia, Turkey) are at the stage of planning the airborne pollution monitoring. To support these national efforts five high-volume aerosol samplers were provided at the beginning of 1990 to Cyprus, Israel, Malta and Yugoslavia. For better co-ordination of regional activities in this field, contact persons were nominated in Cyprus, France, Israel, Morocco, Spain, Tunisia, Turkey and Yugoslavia.
- 4. In connection with the preparatory activities related to the Tenth ICSEM/IOC/UNEP Workshop on the Pollution of the Mediterranean, to be held in Perpignan in the framework of the Congress General Assembly of ICSEM (15-20 October 1990), a small meeting was held in Athens with the two key-note speakers who will prepare a discussion paper on, respectively, "Pollution Problems in the Mediterranean Sea and Relevant Research Priorities" and "Monitoring Strategies of Marine Pollution". Considering the wide coverage of the two papers and the large number of scientists who will attend the Workshop, the conclusions of the discussion will be used as part of the analysis review of the MED POL monitoring and research components which will allow the Med Unit to propose to the Contracting Parties the follow-up to the MED POL PHASE II programme.
- 5. A meeting was held in Zagreb on 20 February 1990 to review and revise the National Monitoring Programme of Yugoslavia. Similar meetings are planned to be held in the future in other MED POL participating countries.

Data Quality Assurance

- 1. During 1989 two courses were held at MESI-IIMR, Monaco, on the analysis of chlorinated hydrocarbons (10-28 July) and petroleum hydrocarbons (11-29 September). Additional specialist training was provided on organotin analyses (3-6 July). A total of eleven trainees were received by the Monaco laboratory from six Mediterranean countries.
- 2. Four extended Quality Assurance missions were made by MESL personnel to Morocco and Egypt to implement and advise on trace metal and organic contaminant analyses.
- 3. A UNEP/IOC/IAEA Reference Method for Marine Pollution Studies (number 57) on "Contaminant monitoring programmes using marine organisms: Quality Assurance and Good Laboratory Practice", was edited and will be published during 1990.
- 4. The Quality Assurance Programme implemented in 1989 will be extended through 1990. Training courses and experts' missions are planned, together with intercalibration exercises, to measure the relative progress of laboratories and the analysts involved.

Intercalibration

- 1. During 1989 four intercalibration exercises were completed. Reports have been issued which discuss results for chlorinated hydrocarbons in Marine Sediment SD-M-2/OC (IIMR Intercalibration Exercise Report No. 42, December 1989) and Tuna Homogenate IAEA-351 (IIMR Intercalibration Exercise Report No. 44, December 1989). Trace metal intercalibration results for SD-M-2/TM and Tuna Homogenate IAEA-350 are currently being processed using a newly installed computer programme which statistically appraises the data.
- 2. A marine sediment from a contaminated coastal bay in the Mediterranean was prepared as intercalibration material during 1989 and will be distributed early in 1990 to all MEDPOL monitoring laboratories.
- 3. In addition, work was commenced on the preparation of contaminated mussel tissue from a Mediterranean coastal site as an intercalibration material. This material will be distributed late in 1990.
- 4. The MEDPOL bank of standards and reference materials (available for distribution from MESL, Monaco) continued to grow and presently comprises over 350 material. These are available on request to laboratories throughout the region.
- 5. During 1989 data quality and participation continued to improve for trace metal analyses. However, it appeared that the analyses of organic contaminants requires much more attention and future efforts will be heavily focussed on these contaminant groups. During the present biennium, a number of workshops and additional reference methods are planned in order to strengthen the programme of organic contaminant measurements. Additionally, new standards and reference materials will be issued to all laboratories participating in this work. Petroleum hydrocarbons will be included in routine intercalibration exercises. Additionally, specialist exercises will be conducted on organotin compounds in water and sediments and on organomercury in biota.

Maintenance

Regular service visits to MEDPOL participating institutions continued throughout 1989 by the MEDPOL instrument maintenance engineer based at the Marine Environmental Studies Laboratory (of IIMR, IAEA) in Monaco. In addition to regular and emergency service visits of laboratory and field instruments, the MESI-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.

MED POL Data Processing

- 1. For last four years, all MED POL Data Processing activities have being carried out on the PC level, changing gradually from the PC-AT compatibles (utilized in initial stages), to more powerful PC-386 based equipment. Most of the software continued to be developed in-house, based on the commercial products.
- 2. Major data processing activities are: Keeping of data inventories (mainly agreements, reports, research/fellowship/training activities, equipment, and bibliographies) in database-oriented structures, data manipulation/query/reporting/graphical presentation, data analysis, more sophisticated presentation (including scientific graphing and mapping), and network communication with the countries.
- 3. MED POL Phase II Monitoring Agreements data have been regularly entered to a database, as an ongoing routine activity for each received signed agreement. These data consist of station characteristics, parameters, matrices, frequency of measurements, related institutes and other relevant information. At present, the data cover a total of 13 Mediterranean countries, and the period from 1983 to 1989 covering sources of pollution, coastal waters and reference areas.
- 4. MED POL Phase II pollution monitoring data on microbiological parameters, heavy metals, and hydrocarbons have been also regularly entered to a database as they were received from the Mediterranean countries. This database (with over 20,000 data) is kept separately from the Agreements database, and its structure is slightly more detailed.
- 5. MED POL Phase I data (which had already been transferred to the PC medium) are used in conjunction with the Phase II data for assessment purposes, but has been kept separately for the time being.
- 6. Based on the past experience, new enhanced structures are currently being designed for both the agreements and data reporting formats. A draft manual (describing digital formats) has been prepared in cooperation with the MED POL Yugoslav experts, following the consultation meeting held in Zagreb (18 October 1989) on "Data Processing of the National Monitoring Programme of Yugoslavia". As a follow-up, the already existing paper formats will be transferred into magnetic medium in order to speed up the processing procedure of the data.
- 7. Research/fellowships/training and equipment application software which had been developed previously have been improved as needed.

- 8. Two bibliographic computerized databases were compiled through a survey of the world scientific literature (manual and computerized literature search): Marine Pollution by Organotin Compounds (published as MAP Technical Series No. 35, 707 references), and Aquatic Pollution by Organophosphorus Compounds (in print, 882 references). A third bibliographic database, Marine Litter/Marine Debris is under preparation; data entry is ongoing and expected to be printed in the course of 1990. Preparation of a bibliography on the Adriatic was also initiated during a meeting held in Zagreb (17 October 1989) with Yugoslav authorities; Italy is also included in this joint activity.
- 9. As to the scientific analysis and the graphical presentation of the data inventories, during the 1989-90 period, frequent consultations with the scientists and specialists were held (e.g. Consultation meeting with two experts on the processing and scientific analysis of heavy metals data which was held in Athens on 12-13 January 1990), and additional hardware and software were purchased.
- 10. The utilization of the computer network communications and its facilities (Electronic-mail, online access to world databases) has also been realized. Access to such facilities had been established previously, but major progress were achieved in 1989 with formal utilization of the available services. Besides UN offices, communications with a few countries have also been established. Major steps are expected to be taken in the near future with the support of focal points in each country.

Research and study topics

During 1989, a total of 137 projects were ongoing and 39 were completed with a total expenditure of US\$ 286,000. Under this chapter only the research activities more immediately linked to the implementation of the monitoring activities are considered. Other activities are covered in chapter 5.2. a).

Activity A

Projects completed in 1989 - 6
Projects ongoing on 31 December 1989 - 13

Total 1989 contribution - US\$ 40,500

Microbiological projects either continued to be linked with the revision of existing reference methods, or dealt with relationships between different bacterial concentrations in order to eventually establish indicator organisms for viruses and either pathogens. Other projects, dealt with the analysis of organophosphorus compounds, organotin compounds and the criteria for the determination of coastal litter.

Activity F

Projects completed in 1989 - 4
Projects ongoing on 31 December 1989 - 12

Total 1989 contribution - US\$ 21,000

Under this activity, ongoing projects dealt with modelling of circulation of the Mediterranean basins, study of vertical transport processes, effects of climatic change on the Mediterranean and the effects of rivers on the sea water circulation.

Activity H

Projects completed in 1989 - 2
Projects ongoing on 31 December 1989 - 10

Total 1989 contributions - US\$ 23,000

The on-going projects in 1989 dealt with such research topics as:

a) Study of planktonic populations, b) Eutrophication trends in Northern Adriatic, c) Statistical treatment of eutrophication data for the development of criteria for management solutions, d) Study of jelly-fish blooms, e) Effect of algal blooms on benthic organisms.

Activity I

Projects completed in 1989 - 1
Projects ongoing on 31 December 1989 - 9

Total 1989 contributions - US\$ 17,500

The on-going projects in 1989 covered such topics as:

a) Effects of pollution on benthic and planktonic community structures, b) Pollution impact on the physiology and chemical composition of <u>Posidonia oceanica</u>, c) Evolution of the pelagic ecosystem in the Ligurian sea.

Activity J

Projects completed in 1989 - Nil
Projects ongoing on 31 December 1989 - 1
Total 1989 contribution - US\$ 3,000

The ongoing project dealt with the effects of thermal pollution on benthic organisms.

Activity K

Projects completed in 1989 - 6
Projects ongoing on 31 December 1989 - 18

Total 1989 contribution - US\$ 40,400

Microbiological projects covered various aspects of adaptation of pathogenic and indicator organisms to the marine environment, including changes potentially affecting their virulence and/or the applicability of current methodology for their determination in seawater.

A WHO/UNEP Consultation on microbiological pollution of the Mediterranean Sea was held in Valletta, Malta, from 13 to 16 December 1989, and attended by 23 participants from 10 Mediterranean countries and 3 from 2 non-Mediterranean countries (WHO Ref. ICP/CEH 083). The latter were financed from non-MTF sources. The meeting covered reference methods, laboratory quality control and research activities A and K, apart from other components linked with the LBS protocol.

The topics covered in 1989 also included:

a) The importance of gelatinous macroplankton in the transfer of metal pollutants, b) The transformation of organic and inorganic forms of mercury by bacteria, c) The role of <u>Posidonia oceanica</u> in the bicavailability of mercury, d) Biological transfer of radionuclides in the sea, e) Occurrence, fate and effects of synthetic surfactants in the sea.

In the framework of this activity, a consultation meeting will take place in Ia Spezia, Italy from 24-28 September 1990. The meeting will focus on the environmental transformation of chemical contaminants.

Activity L

Projects completed in 1989 - 3
Projects ongoing on 31 December 1989 - 22
Total 1989 contribution - US\$ 39,000

Ongoing projects deal with modelling long range atmospheric transport of pollutants, aerosol remote sensing, concentrations of pollutants in air and atmospheric depositions in some specific areas (the Ligurian and Adriatic Seas, Western Mediterranean and off-shore areas of Morocco and Israel), land-to-sea transport of Saharan dust and photochemical oxidants, transport of pollutants between different Mediterranean areas, transport of pollutants by sedimentation.

Training and Fellowships

As in the past, during 1989 assistance was provided to MED POL participants in the form of individual group training, visit of experts to less experienced laboratories, support for participation at MED POL meetings (workshops, intercalibration exercises and quality assurance meetings) and travel grants for attendance at meetings related to the MED POL programme. Among the various activities, a training workshop on the Statistical Treatment and Interpretation of Marine Community Data was held in September 1989, a training course on the Application of Toxicity Tests in Assessing Marine Contamination Hazards in the Mediterranean was held in Malta in September 1989 and a training course on microbiological methods was held in Tunis in October 1989.

A total of 129 scientists from 15 countries benefited from this support programme for a total expenditure of US\$ 163,914.

Coordination

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).

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.

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, the following meeting of the Inter-Agency Advisory Committee (IAAC) for MED POL took place in 1990, in order to ensure the harmonious cooperation and implementation of the MED POL activities:

- XXIII Meeting of IAAC (Athens, 8-11 January 1990); it reviewed the activities carried out in 1989 and prepared a workplan for the 1990-1991 MED POL activities (doc. UNEP(OCA)/MED WG. 11/12).

Plankton Blooms and eutrophication

- 1. As a follow-up to the decisions and recommendations of the Meeting on the Implications and Control of Undesirable Plankton Blooms held in Athens from 4 to 6 April 1989 (UNEP(OCA)/MED WG. 4/2), a letter was sent by the Coordinating Unit in March 1990 to all MED POL National Coordinators with the purpose of collecting information on specific forms/questionnaires on monitoring and research programmes carried out or being implemented as well as on names of scientists/institutions working at present on the subject of plankton blooms and eutrophication. By the end of March 1990, answers were received form Malta and France.
- 2. From 21 to 25 March 1990 a UNEP-Co-sponsored International Conference on marine coastal Eutrophication was organized in Bologna by the Regione Emilia Romagna. A large number of Mediterranean scientists also attended the Meeting which draw conclusions on a) the scientific basis of marine coastal eutrophication, b) the impact of coastal eutrophication on human activities and economics and c) remedial measures and perspectives. The conclusions of the Conference will be used for the preparation of the assessment document on Mediterranean eutrophication as part of the implementation of the IBS Protocol.

- b) Implications of climatic changes in the Mediterranean region
- 1. Possible implications of climatic changes on the Mediterranean coastal region are presented in the document "Implications of climatic changes in the Mediterranean region" (UNEP(OCA)/MED IG.1/INF. 9) prepared for the Sixth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Athens, Oct. 1989). The document also contains information on the greenhouse effect, as well as actions by OCA/PAC and MAP concerning such effects in regional seas and the Mediterranean.
- 2. Since the preparation of the above document, the following actions took place:
 - A national seminar on implications of climatic changes on the delta of Ebro was held in Madrid in September 1989;
 - Two national seminars (delta of Rhone and Thermaïkos Gulf) are being negotiated with national authorities;
 - The project "Regional changes in climate in the Mediterranean basin due to global greenhouse gas warming", financed by OCA/PAC and implemented by the Climate Research Unit of the University of East Anglia, will be completed by the end of 1990. Results of this project, which will concentrate on predictions in temperature and precipitation changes, will considerably help in future considerations. Its results will be presented on spatial scale which will allow sub-regional, almost local, considerations;
 - With the financial support of OCA/PAC, three studies on selected Mediterranean islands (selected Adriatic islands, Island of Rhodes, Island of Malta) are being negotiated and should be launched by April 1990;
 - Project proposals for studies of implications of climatic changes on Kastela and Ismir Bay are being prepared;
 - The Intergovernmental Panel on Climate Change (IPCC),
 Subground on coastal zone management, held the workshop on adoptive options and policy implications of sea level rise and other coastal impacts of global climate change (Miami, 27 Nov. 1 Dec. 1989). Two sessions were devoted to the Mediterranean and two members of the Mediterranean Task Team presented papers on Mediterranean case studies (delta of Po and delta of Ebro);
 - The publication by the end of 1990 of book "Implications of climatic changes in the Mediterranean region" is being negotiated with Pergamon Press;

- Members of the Mediterranean Task Team have been active in presenting, on numerous occasions, the results of the work so far carried out.
- 3. For the Scientific/Technical Committee meeting in 1991, the Mediterranean Co-ordinating Unit will prepare a document which will review projects and actions, relevant to climatic changes, by national or international bodies, which concern the Mediterranean Sea, and will propose a workplan of future activities.
 - 5.4 Prevention and Combating Pollution from Ships
 - (a) <u>Implementation of the Protocol on Emergency</u>
 - (b) The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea

1. Experts/Consultants

No expert or consultant was engaged by the Centre during the period under review. However following a request made by the Greek National Focal Point for assistance in adapting their oil National Contingency Plan to the response to accident involving chemical substances, the Centre is in the process of hiring a Consultant scheduled to visit Greece during the week starting 22 April 1990.

- 2. Status of the implementation of activities
- a) Studies and surveys:

Following the decision of the Sixth meeting of the Contracting Parties, the Centre undertook the initial step for the establishment, on a voluntary basis, of a regional network for collecting data on maritime transport of harmful substances.

Substantial contributions from Mediterranean Coastal States are still expected.

- b) <u>Meetings, Seminars, Workshops, Study Tours, Training Courses, Fellowships undertaken or under preparation</u>
- i) Training Courses organized and financially supported by REMPEC
 - . MEDEXPOL 89. A practical training course on the use of dispersants and other products in Response to Oil Spills, was organized by the Centre in cooperation with EEC and with the logistic support of the Port Autonome de Marseilles. It was held in Marseilles, France from 16 to 21 October 1989.

The total number of participants was 37. 17 came from the EEC Mediterranean Countries, the Regional Centre financed the participation of 13 trainees nominated by the Centre's Official Focal Points, and the Commission of the European Communities financed the participation of 13 participants from 10 member States of the EEC including 1 participant each from France, Greece, Italy and Spain.

ii) Training Course organized in cooperation with REMPEC:

Following a request of the Egyptian Authorities, the Centre assisted Egypt in preparation, organising and conducting the training course on Marine Pollution Prevention, Control and Response, held at Alexandria, Egypt between the 10 and 19 February 1990.

The course was organized by the Arab Maritime Transport Academy (AMTA) in cooperation with REMPEC and was financially supported by the Commission of the European Communities. The Ports and Lighthouses Administration co-sponsored the course. It was the sixth course of its kind jointly organised by AMTA and REMPEC since 1984.

iii) <u>Participation in Meetings, Seminars, Workshops, Study Tours,</u> Training Courses

The Centre in cooperation with the Mediterranean Course Programme organised by the International Ocean Institute with the co-sponsorship of the Co-ordinating Unit for the Mediterranean Action Plan, organized a visit and a number of lectures at the Centre on the 14 November 1989.

On 28 February 1990 the Centre organised a day's visit and a number of lectures at the Centre for the students of the International Maritime Law Institute established in Malta.

The Director delivered a lecture at a Training Course organised with the financial support of the EEC by the Warren Spring Laboratory in Stevenage, United Kingdom, 13-20 March 1990.

The Director attended the meeting of RAC Directors held in Athens, Greece from 17 to 19 January 1990 for programming and coordinating MAP activities.

The Director attended the XXIX Session of the Marine Environment Protection Committee of IMO from 10 to 19 February 1990 with special reference to the working group on International co-operation on oil pollution preparedness and response. The Technical Expert of the Centre took part in an open sea experimental study on the behaviour of accidentally released volatile products (POLIUIMAR II) jointly organised by the French Navy and CEDRE with the technical and logistic assistance of CENG. (Centre d'Etudes Nucleaires de Grenoble) from the 23 to 25 October 1989 in Toulon, France.

- c) Status of Documents, Reports, Manuals, Guidelines being prepared
- i) REMPEC published and disseminated its annually updated "List of Alerts and Accidents in the Mediterranean" in January 1990.
- ii) The Centre published and disseminated in January 1990 a new edition of the "Companies offering services in cases of emergency in the Mediterranean".
 - The new edition includes services related to response to accidents involving hazardous substances as well as to response to oil pollution.
- iii) The proceedings of the workshop on combating accidental pollution of the Mediterranean Sea by harmful substances, English version, will be finalized soon.
- iv) A new edition of the "Directory of the Mediterranean Region of participants to Marine Pollution Combating Training Courses" including a breakdown of costings is still in preparation.
- d) Status of Implementation of other Activities
- i) Khark 5 Accident Although the accident of the Khark 5 occurred outside the area covered by the Barcelona Convention, the Centre closely followed the development of the situation from the very beginning.

Immediately after being informed of the accident on the 20.12.89 by EEC (Section d'Alerte Pollution) the Centre through its focal point informed the Moroccan authorities.

From that time the Centre:

- organized a continuous watch collecting daily information regarding the evolution of the situation (by contact with ITOPF, Lloyd's Spanish Authorities, etc...);
- maintained contact as much as feasible with Moroccan Authorities providing them with information regarding possible assistance (from companies, from governments participating in the MAP) and expertise for dealing with this type of pollution;

- established contact with relevant authorities in France and with EEC in order to ensure that, if needed and requested, assistance would be provided;
- . IMO, in close co-operation with the Centre, made a request to the owner of the vessel, the P and I Club and the salvage company to take urgent and proper action and to use adequate resources needed to fully control the situation.

The Centre disseminated to its official focal points a report on the Khark 5 Accident prepared and based on the information received and contacts established as from the 20 December 1989

- ii) On their request the Centre provided assistance to the Maltese authorities in drawing up specifications for oil pollution combating equipment for purchasing purpose.
- iii) Following a request from the Greek National authorities, the Centre, in close cooperation with them, prepared terms of reference for a consultant who will assist Greece in adapting their National Contingency Plan to response to accidents involving hazardous substances. The consultancy should be undertaken soon.
- iv) Change in Personnel

Ms. Renee Laiviera, Information Assistant resigned her post as from 12 December 1989. She was authorized to terminate her employment on 12 November 1989 due to outstanding vacation leave.

Ms. Anna Micallef Trigona, Bilingual Secretary, resigned her post as from 31 December 1989.

Both Ms. Iaiviera and Ms. Micallef Trigona have been replaced respectively by Ms. Marie Benoit and Ms. Iucia Burgess. Ms. Benoit was recruited on 15 February and Ms. Burgess on 5 February 1990.

Mr. Pascal Moreuil, an engineer seconded by the French Government ended his assignment at the Centre on 31 January 1990 and he was replaced by Mr. Philippe Meynard who arrived in Malta on 21 February 1990.

v) IMO is presently carrying out a salary survey for Malta (21 March - 6 April 1990).

3. General remarks

i) As far as the capacity of the Centre regarding Word Processing and Data Processing as well as Communications are concerned, the situation has improved with the acquisition of a facsimile machine and a PC computer and printer. Nevertheless, the Centre still need additional Word Processing Terminals (2 in number), and the accident of Khark 5 revealed the difficulties for the Centre to communicate efficiently using its means available at present. During its meeting in Cairo (February 1990), the Bureau of the Contracting Parties supported the proposal of evaluation mission of the communication system of the Regional Centre in Malta. Consequently it was agreed between MEDU and IMO, that the latter will send an expert to Malta to evaluate the communication capabilities of the Centre and propose solutions to improve the existing situation.

ii) The present capabilities of the Centre for the reproduction of documents (in quality and quantity) are not sufficient.

A more adequate photocopying machine will be purchased as soon as the transfer of funds approved for disbursement will be made.

- iii) The change of personnel and the fact that the post of Chemist has not yet been filled created delay in the implementation of the planned activities.
- iv) According to information received from the Maltese Ministry of Foreign Affairs, the Government of Malta is ready to sign, prior to June this year, the Headquarters Agreement regarding the Centre.
 - 5.5. Protection of the Common Mediterranean heritage
 - (a) <u>Implementation of the Protocol concerning Specially</u> Protected Areas
 - (b) The Specially Protected Areas/Regional Activity Centre (SPA/RAC)

1. Host country agreement

In accordance with decisions of the Sixth Ordinary Meeting of the Contracting parties, the Co-ordinating Unit conducted intensive contacts with the Tunisian authorities and Director of the SPA Centre with a view of finalizing the agreement between UNEP and the host country on their mutual obligations regarding the Centre. The administrative officer of the MEDU paid a visit to Tunisia from 18 to 24 December 1989 in this regard. MEDU was officially notified by the Director of SPA/RAC that the draft agreement has raised no major objections, however, it must be circulated to different ministries in accordance with Tunisian law. It is expected to be signed during the first half of 1990. Consequently, the letter of understanding to be signed between UNEP/MEDU and the Tunisian Government covering the activities to be carried out during the period 1 January 1990-31 December 1991, was delayed. No funds were channelled to SPA/RAC

accordingly. In order not to delay the implementation of some activities, the Bureau of the Contracting Parties was informed that the IUCN Expert would be stationed at MEDU office in Athens with the task of implementing these activities and until the agreement be signed.

2. Data Banks

The data banks on countries, protected areas, experts and the bibliography are constantly updated (countries 19, protected areas 260, experts 446, bibliography, new version 100 references, thematic bibliography, marine turtles 300, monk seal 275). An additional file on Mediterranean birds in 6 languages was started (740 references).

3. Existing Protected Areas

The Directory of Marine Coastal Protected Areas in the Mediterranean region (areas of ecologic and biologic interest) was published (English version) in 1989 by the Co-ordinating Unit as MAP Technical Reports Series No. 26 The French version was published and distributed in April 1990, as MAP Technical Reports Series No. 36.

The development of a <u>network</u> of Mediterranean Specially Protected Areas is in progress and will be speeded up considerably in 1990. The second part of the Directory concerning areas of scientific, aesthetic, historic, archaeological, cultural or educational interest will be developed during 1990.

4. Selection of sites and creation of protected areas

On the basis of existing references, the Centre's files contained a list with over 150 sites which merited protection. 55 sites were proposed by experts (IUCN-RAC/SPA) as priorities and a descriptive repertory of these sites is being developed. A comparison of this list with other lists compiled by the Countries or various organizations on particular subjects (birds, seals, turtles, marine plants) was carried out. A workshop on this topic is scheduled for 1990.

5. Species threatened with extinction

a) Preservation of marine turtles

The Action Plan for the preservation of the Mediterranean marine turtles was adopted during the Sixth Meeting of the Contracting Parties (Athens, October 1989). A budget line was allocated for its implementation in 1990.

b) Preservation of the monk seal

The Action Plan which was adopted in 1987 was presented at the Madeira meeting (Council of Europe, September 1989). The need to implement it in all the countries where the monk seal is found was

recognised. Finally, it was proposed that the co-ordination of all the <u>Monachus monachus</u> programmes be carried out by the SPA Centre within the framework of the MAP/UNEP Programme.

c) Marine plants

The document "Red Book of the Mediterranean marine plants threatened with extinction" defines a certain number of species and sites to be protected; both species and sites will be followed very closely.

In 1990, a bibliographic synthesis of the <u>Posidonia</u> meadows will be done, as will one on replanting.

6. <u>Legislation</u>

The synthesis and analysis of international and national legislations pertaining to the environment in the Mediterranean Coastal States were completed (200 documents). An analytical essay of legislation concerning the Mediterranean Specially Protected Areas, drafted in 1989, will be the basis for meetings and work scheduled in 1990.

An inventory of available texts on legislation concerning under water archaeology was completed.

7. Assistance to countries

Assistance to countries is handled either directly at the request of the countries or in collaboration with other programmes. In 1990 activities are scheduled with Algeria and Libya. In collaboration with PAP, activities will take place in Rhodes (Greece) and Sfax (Tunisia).

Publications - Translations

Documents published by UNEP/MAP:

- English version of the list of existing Protected Areas (1989)
- French version of the list of existing Protected Areas (1990)

Documents published by the Centre in 1989:

- The Benthos of the island of Zembra (French, 500 copies);
- La Galite/monk seal (French, 500 copies)
- Synthesis of studies concerning the land part of the island of Zembra (French, 500 copies);
- Management of a Mediterranean protected space (example of the Port-Cros national park (France)) (French, 500 copies);
- Biogenic constructions in the Mediterranean (English, 500 copies);
- Methodology of selection of sites with a view to their protection (French, 500 copies).

Documents published in 1990 or in progress:

- Action Plan for the preservation of marine turtles and monk seals (500 copies, English, Arabic, French).

The translation to English of the Study "The Benthos of the island of Zembra" was completed in November 1989 and is scheduled for publication in 1990.

(c) Preservation of the 100 Historic Sites

1. The Director of the Atelier du Patrimoine, the Marseille Centre entrusted with activating the network of 100 historic sites, as permanent Secretariat for those sites in collaboration with UNESCO, has contacted local authorities in Algeria, Malta, Egypt, Tunisia, France and Italy upon their request.

For Algeria, possible bilateral programmes for the sites of Tipasa, Cherchell, Algiers, Hippone-Annaba are studied; so are programmes for Malta (Saflieni, Ggantija and Valetta), Egypt (Abu Mena, Alexandria, Cairo and the Pyramids), Tunisia (Kerkouane, Sidi-Bou-Said, Carthage, Tunis, El-Jem and Djerba), France (Cucuruzzu and Filitosa) and Italy (Venice, Pisa, Syracuse and Palermo-Monreale). Those historic sites included in the coastal areas management programmes are already the object of common actions launched in Rhodes.

- 2. A diagnostic file of historic sites has been established and already used for Malta, Algeria, Tunisia, Egypt and France. Several situation reports are in preparation concerning the state of deterioration of the various sites included in the list of the 100 sites, the excessive number of visitors and the underwater archeological sites linked with sites on land, with a view to proposing joint actions. In connection with ORIENTATIONS, published after the January 1989 Marseille meeting, aid for the drafting of documents was established with those responsible for the sites of Rhodes, Hippone and Tipasa.
- 3. As concerns training, three officials of the Association de Sauvegarde de la Medina de Tunis completed in January 1990 a course given at the Atelier du Patrimoine.
- 4. A publication on the 100 sites is in preparation.
 - 5.6. Environmentally sound management of the Mediterranean coastal zone
 - (a) <u>Prospective analysis of the relationship between</u> environment and development

The Blue Plan/Regional Activity Centre (BP/RAC)

1. Following the decisions of the Sixth Ordinary Meeting of the Contracting Parties, the prospective work of the Blue Plan is focusing more and more on integrated development of the Mediterranean coastal areas.

- 2. Mr. Bernard Glass took office as BP/RAC Director in January 1990. Mr. Michel Batisse and Mr. Bernard Glass participated in the meeting of RAC Directors held in Athens (January 17-19 1990).
- 3. The results of the Blue Plan scenarios draw an ever greater interest; their dissemination continues. Mr. Michel Grenon made a number of presentations at Brussels and Luxembourg during meetings organized by the Commission of the European Communities and at Toulon and Lyon for regional authorities.
- 4. Within the framework of prospective work of integrated coastal development of the Mediterranean coastal areas, Mr. Glass and Mr. Grenon visited on a study mission at the end of February 1990 the Iskenderun area, following upon an invitation of National Turkish authorities (Under-Secretariat of State for the Environment and Blue Plan Focal Point). Discussions were extremely positive and the principles for a possible cooperation on the Iskenderum project were discussed with Mr. Vohbi Dinceler, Minister in charge of the Environment and Prof. Hamanci, Project Director.
- 5. At Sophia Antipolis discussions continued between Blue Plan experts (economics, water, forests) and PAP representatives (in September 1989 and 20-21 February 1990) on the methodology of the development/environment scenarios of coastal areas.
- 6. After development and updating of some additional procedures, the transfer of the data base of the Blue Plan to the Co-ordinating Unit was carried out in mid-March 1990 (diskettes, description and user's manual).
 - (b) Coastal planning and management

The Priority Actions Programme/Regional ActivityCentre(PAP/RAC)

1. General Considerations

The year 1989 was the end of a two-year programme in which PAP started implementing 4 pilot projects in 4 countries and preparing several others. In the 1988-1989 period, PAP gradually shifted the focus of its activities from individual priority actions to the practical application of knowledge and experience on selected coastal areas. The priority action "Integrated Planning and Management of Mediterranean Coastal Zones" grew in importance and became a global umbrella for all activities of PAP. In that period, one of the three proposed cooperative projects (Seismic risk reduction) was launched in Genoa as a UNDP project financially supported by Italy, and the other (Protection from rainfall erosion) was prepared to cover a two-year pilot programme in Spain as a host country. The third project could not materialize because the necessary financial resources failed to be secured.

tata in the South

The work in individual priority actions was directed to the preparation of methodological tools and training materials, and to the organization of training courses which were designed to present the best experiences applicable in the Mediterranean, particularly in Mediterranean developing countries.

The Sixth Ordinary Meeting of the Contracting Parties (October 1989) approved the refocusing of all MAP programmes on the management of coastal areas. The Priority Actions Programme had to be programmed accordingly extended and incorporated into MAP Coastal Area Management Programme (CAMPs) in which all MAP components were expected to take part. This re-programming meant bringing PAP activities into line with MAP programmes, as well as the preparation of comprehensive sets of documents for each of the four ongoing PAP programmes.

1989 was the year of difficulties concerning the remittance of resources allocated by the budget. That necessitated the preparation of as much as 4 revisions of the project document and, at the end of the year, the postponement of some activities due to a shortage of finances.

At the beginning of 1989, the Federal Assembly of Yugoslavia adopted the Act on the Centre for PAP which regulates the legal status of the Centre in the host country. However, the contract between UNEP and the host country has not yet been finalized.

As the major achievements of PAP in 1989 and at the beginning of 1990, the following may be listed:

- (a) Beginning of the implementation of 4 PAP country pilot projects (The Bay of Izmir Turkey, The Bay of Kastela Yugoslavia, The Syrian Coastal Region, and the Island of Rhodes Greece) and, therein, the completion of a number of significant practical actions: Izmir several missions, EIA of a sewage treatment plant, training course on integrated planning, a synthesis of oceanographic studies; Kastela a set of documents on the natural characteristics of the Bay, study on the red tide, training on GIS application on pcARC/INFO, hazard assessment and risk management methodology, formulation of programmes for the cooperation with European Community and the World Bank; the Syrian Coast several missions, training on integrated planning, preliminary study of the integrated plan; Rhodes several missions, a complete programme of activities at the level of MAP, training course on environmentally sound energy planning (IFAP).
- (b) Beginning of the implementation of programmes initiated by PAP which maintains its catalytic role, namely UNDP project on seismic risk reduction, ICONA-PAP-FAO pilot project on erosion mapping and monitoring, the Maltese project on water resources management (with BRGM as the implementing institution), the action on 100 historic sites with the centre in Marseille.

- (c) Preparation of EIAs applying a simplified procedure which was developed by PAP in cooperation with OCA/PAP and MEDU (two EIAs have been prepared in Cyprus and two in Egypt: three EIAs are being prepared in Morocco, one or two in Tunisia and one in each of CAMPs.
- (d) Preparation of training documents and organization of training courses in English and French on the following subjects: sewage treatment plants management and maintenance (in cooperation with CEFIGRE France); methodological approach to designing sewage treatment plants in large Mediterranean towns (in cooperation with the City of Marseille); practical application of renewable energy sources in the Mediterranean region (with CIEMAT Spain). Organized were also the courses in GIS, integrated planning and energy planning.
- (e) Completion or preparation of a number of methodological documents (Code of practice for liquid waste, Code of practice for solid waste, Guidelines for an environmental approach to planning and management of tourism development, Methodology of conservation and rehabilitation of historic settlements, Guidelines for taking inventory of sites for aquaculture activities).
- (f) Continuing cooperation with interested institutions of the UN system and others, and additional efforts in strengthening the cooperation with all Mediterranean countries which have not been involved in PAP to a full measure.
- 2. <u>Implementation of Programmes within Cooperative Projects and</u>
 Individual Priority Actions
- (a) Seismic risk reduction in the Mediterranean (UNDP as the implementing institution, in cooperation with UNDRO).
 - The office of the project for seismic risk reduction in the Mediterranean (SEISMED) was inaugurated in Genoa. The resources were secured, the project was launched, and the meetings of working groups were convened. Also, a workshop on earthquake hazard assessment and its application to disaster mitigation has been planned for May 1990.
- (b) Pilot project on soil erosion mapping and measurement in the Mediterranean coastal zones (Spain as the host country, and ICONA as the host institution).

PAP, in cooperation with ICONA, prepared a two-year pilot project. In addition to PAP and ICONA, all institutions involved in the project participated in two meetings: UNEP-Nairobi, FAO, ISRC-Wageningen (The Netherlands). An expert meeting on the implementation of the pilot project was held (Malaga, 12-14 December 1989) with the participation of the involved agencies and countries. ICONA-PAP-FAO missions were envoyed to Turkey and Tunisia, and the one to Morocco is being organized. The project management has been established in Spain, a mission debriefing is being prepared, and a separate project defined for each participating country.

- (c) Definition of ecological criteria for a rational development and protection of aquaculture in Mediterranean coastal areas (a project under preparation). Resources for the outset of this project could not be secured. However, the documents on taking inventory of sites suitable for aquaculture are in the stage of preparation, as well as those on the inclusion of aquaculture studies in the process of integrated planning and management of coastal areas.
 - cooperation was established with GRID/UNEP-Nairobi and UNITAR-Geneva concerning the application of the geographic information system in the integrated planning and management process in coastal areas;
 - cooperation was established with the World Bank and the European Investment Bank regarding financing and support to MAP and PAP programmes.
- 3. Activities and outputs in the frame of priority actions
- (a) Support to PAP.
 - PAP Bulletin (No.1/89) in English, French and Arabic (300 copies);
 - two books of MAP Technical Report Series ("Land Use Planning in Earthquake Zones - Seismic Risk Reduction in the Mediterranean Region", and "Promotion of Soil Protection as an Essential Component of the Environmental Protection in the Mediterranean Coastal Zones");
 - the Director of PAP/RAC participated in the meeting organized by the World Bank (Paris, 7-8 December 1989) and presented the experiences of PAP in the implementation of CAMPs;
 - unofficial consultations of the representatives Albania, Greece, Italy and Yugoslavia, as well as Economic Community and MEDU for the programme of the "Adriatic Initiative" (Athens, 18-20 December 1989), and the participation of PAP in the bilateral programme of Italy and Yugoslavia (Split, 12-13 February 1990).

- (b) Water Resources Development for Mediterranean islands and isolated Coastal Areas
 - Meeting of the representatives of the Government of Malta, BRGM and PAP concerning the implementation of the project "Management of the water resources of the island of Malta" (Split, 30-31 March 1989);
 - experts of PAP, Malta and ERGM prepared the lectures and programme for the training course on water resources which was attended by 30 Maltese participants;
 - preparation, in cooperation with FAO, of the Environmental Guidelines for municipal wastewater re-use in the Mediterranean region;
- (c) Rehabilitation and reconstruction of Mediterranean Historic Settlements
 - Workshop on the evaluation of historic buildings and sites (Split, 30 November - 1 December 1989), with the participation of 13 Mediterranean countries and ICCROM, discussed an introductory report and 7 baseline documents which presented the experience of 7 Mediterranean countries, and proposed a set of criteria for evaluation;
 - meeting of experts to prepare a workshop on planning, designing and implementation of conservation projects in historic sites (Split, 5-6 February 1990).
- (d) Solid and Liquid Waste Management in the Mediterranean Region
 - workshop to examine and evaluate Practical guides for Solid and Liquid Waste Management in the Mediterranean Region (Split, 25-28 September 1989) was attended by the representatives of 12 Mediterranean countries, EC, WHO and BRGM; two working groups evaluated the Practical Guides which are expected to be published in their final version in 1990;
 - training course, in French, (Sophia Antipolis, 4-12 December 1989) on sewage treatment plants management and maintenance was prepared and organized in cooperation with CEFIGRE (documents originally prepared in English were translated into French).

- (e) Development of Mediterranean Tourism Harmonised with the Environment.
 - Workshop to discuss and amend Guidelines for an environmental approach to planning and management of tourism development in Mediterranean coastal zones (Split, 29-31 May 1989) was held with the objectives to evaluate the baseline documents from 7 Mediterranean countries, to amend the Guidelines proposed by PAP, and to propose further activiteis; it was attended by the representatives of 12 Mediterranean countries, UNESCO/MAP and WIO;
 - with a representative of WTO, PAP agreed on cooperation in the field of tourism development in the Mediterranean (Split, 30 May 1989);
 - final version of the Guidelines is being prepared.
 - (f) Mediterranean Co-operative Network in Renewable Sources of Energy.
 - UNEP-PAP-CIEMAT meeting agreed on joint activities in 1989 and in the 1990-91 biennium, defined a global strategy for this priority action in 1990-1991, and proposed its inclusion in the pilot project on the environmental approach to energy planning initiated by UNEP;
 - PAP-CIEMAT training course (in English) on practical application of renewable sources of energy in the Mediterranean Region (Madrid-Almeria, 20-29 November 1989) was attended by 33 participants from 7 countries.
 - (g) Environmental Impact Assessment (EIA) in the Development of Coastal Zones.
 - mission of two PAP consultants visited Egyptian Environmental Affairs Agency (Cairo, 9-11 October 1989) to discuss organizational issues of the workshop and to review the progress of the two case studies;
 - mission of two PAP consultants visited Morocco to discuss the preparation of three Moroccan EIA case studies (Rabat, 13-22 September 1989);
 - International workshop on the Application of the EIA Procedure (Cairo, 19-22 November 1989) was held with the participation of 23 experts from 19 countries, and the representatives of 5 international organizations;
 - mission of PAP consultants to Tunisia to organise the preparation os EIA case studies in this country (2-4 April 1990);

- preparation of the final text of "environmental Impact Assessment - A Practical Approach", in cooperation with OCA/PAC and MEDI.
- (c) Mediterranean Coastal areas management programmes (CAMP)

The Programme of Integrated Planning and Management of Coastal Zones

(a) General

- UNEP-UNITAR-PAP Meeting on PAP GIS Activities on pcARC/INFO; (Split, October 1989)
- the Assistant Director of PAP/RAC took part in the seminar "Land Use and Remote Sensing" (Montpellier, 10-13 October 1989) and presented the experience of PAP in the application of GIS;
- mission of the Director of PAP to Tunisia (7-9 December 1989) to discuss with the representatives of Tunisian authorities the initiation of the Sfax CAMP;
- UNEP/GRID-UNITAR-PAP meeting will be held in Split (May, 1990) to evaluate the application of GIS;
- preparation of a document presenting the activities relative to integrated planning and management of coastal zones in the Mediterranean (sponsored by OCA/PAC) for the symposium "Littoral 90" to be held in Marseille in July 1990;
- participation of the Director of PAP in a fact-finding mission in Egypt to discuss with Egyptian authorities the initiation of the Fouka CAMP (13-15 March 1990).

(b) The Bay of Kastela Yugoslavia)

- sub-project "Hazard Analysis and Risk Management in the Area of the Kastela Bay" initiated within the frame of the Kastela Bay Project;
- methodology developed for the use of scenarios which will be tested, together with BP/RAC, in the Kastela Bay and in other CAMPs;
- Completion of the second phase of PAP-GRID training course on the application of GIS on pcARC/INFO (Split, October-December 1989);
- two PAP experts envoyed to participate in a 6-month UNITAR training course on GIS (Geneva, November 1989);

- meeting to evaluate the project outline on hazard and risk assessment, with the participation of UNEP (Industry and Environment), IAEA, and institutions from the Netherlands and England (Split, 5-6 March 1990).

(c) The Bay of Izmir (Turkey)

- meeting to prepare the training courses on the methodology of integrated planning in Izmir (Split, 16-17 October 1989);
- organization of the training course on the methodology of integrated planning as part of the Izmir CAMP; participation of 22 experts (Izmir, 11-22 December 1989);
- completion of the programme proposal for activities in 1990-1991.

(d) The Island of Rhodes (Greece)

- meeting with Greek experts, UNEP and Stockholm Environmental Institute, to prepare a programme on the environmental approach to energy planning in the island (Athens/Rhodes, November/December 1989);
- programme proposal prepared for project activities in 1990-1991;
- activities started on the implementation of the water resources management plan, energy planning, and solid and liquid waste management.

(e) Syrian Coastal Region

- Completion of the first phase of work on the Preliminary Study (Damascus, January-February, 1989):
- mission of PAP experts on historic and archaeological sites to Syria for the needs of the future integrated plan (2-10 February 1989);
- completion of the second phase of the joint Syrian-PAP team work (April, 1989);
- meeting of Syrian-PAP team of experts (Split, 4-6 May 1989) to review the reports to be included in the Preliminary Study:
- completion of the third phase of the joint Syrian-PAP team work, the first draft of the Preliminary Study, and the report of the progress of work to Syrian authorities (June 1989);
- PAP-MEDPOL mission to Syria on the state of pollution of Syrian coastal waters (15-30 August 1989);

- meeting of PAP and Syrian Team for the preparation of the final text of the Preliminary Study (Split, 2-4 November 1989);
- Completion of the programme proposal for activities in 1990-1991.

4. General Remarks

The progress of Programme activities and results achieved in 1989 and in the first quarter of 1990 give ground for the following remarks:

- (a) the determination to test the obtained experiences and find their practical application in selected coastal areas, and to build up a network of experts and institutions engaged in coastal area management programmes seems to have been correctly judged. As a further step, the separate networks established within individual CAMPs should be linked into a unique network to enable a permanent exchange of experience between individual programmes. The same confidence applies to the priority actions which have been increasingly directed to the process of planning and management in coastal areas.
- (b) The focus of most actions which is presently on the development and application of the methodology and tools of integrated planning, should be gradually extended to cover the methods and instruments of management, at first, on a global (regional) level, and then on local (operational) levels.
- (c) By the end of the current biennium, the refocusing of PAP should be completed to become, in 1991-1992, a complex activity programme of integrated planning and management, firmly linked to other MAP programmes, particularly the Blue Plan. This should be the framework other priority actions should gradually feed into. Also, the process of decentralization, that is the gradual transfer of some activities to new programme activity centres, should be continued, if there is interest in and capabilities for that.
- (d) In the period preceding the next meeting of the two MAP Committees, practical implications of such orientation should be examined and eventual improvements of the internal organization and structure of PAP entre proposed.

5.7 Information

1. During the period under consideration, MEDWAVES No.18 was published and distributed in English and French.

- 2. The first issue of the new MAP Bulletin (MEDWAVES) agreed upon by the last meeting of the Contracting Parties to incorporate all existing information bulletins published by MED Unit and the regional Centres, will come out at the end of April 1990 in three languages (Arabic, English and French).
- 3. Distribution of information materials in various languages has been carried out in preparation for the Mediterranean Environment Week (5-11 June 1990).
- 4. MAP Technical Reports Series Nos. 30 to 38 were issued and distributed.
- 6. <u>Date, place and organization of the next meeting of the Scientific and Technical Committee and the Socio-Economic Committee</u>

During the Sixth Ordinary Meeting of the Contracting Parties to the Convention for the protection of the Mediterranean Sea against pollution convened in Athens from 3 to 6 October 1989, it was decided to:

"Convene every year, on the same dates, the Scientific and Technical Committee and the Socio-Economic Committee to review both separately and together the progress of the Action Plan and to prepare the decisions of Contracting Parties" (UNEP(OCA)/MED IG 1/5).

As the next meeting of the Scientific and Technical Committee and the Socio-Economic Committee will have the task of thoroughly reviewing the draft programme and budget for the next biennium 1992-1993. It is proposed to give an ample time to each of these committees in order to accomplish this objective and to prepare the decisions for the next meeting of the Contracting Parties (Cairo, October 1991). Thus it is proposed that the meeting would be held in Athens from 27 to 31 May (3 to 7 June).

The meeting will be organized in such a way that the two Committees will meet jointly in a plenary session on 27 May to consider matters of common interest and, then they will meet separately on 28, 29 and 30 May to review their respective programme components and jointly again on 31 May (last day of the meeting) to adopt their final report.

UNEP(OCA)/MED WG.12/3, Annex I

for the Protection of the Mediterranean Sea Against Pollution Status of Contributions as at 31 March 1990 (in United States Dollars) Regional Trust Fund

			Collections	Collections	Collections		Pledges
	Unpaid pledges	Pledges for	during 1989	during 1990	during 1990	pledges for	F 0 #
COUNTRIES	as at 31 Dec.	1990	for 1990	for prior	for 1990 and	1990 and	1991
	1989			Years	future years	prior years	
ALGERIA	32,342.66	35,116.00	:	16,495.64	;	50,963.02	36,872.00
CYPRUS		4,683.00	1,444.18	:	:	3,238.82	4,917.00
EGYPI	22,920.66	16,389.00	•	22,920.66	:	16,389.00	17,208.00
FRANCE	588,658.97	1,266,800.00	•	588,658.97	:	1,266,800.00	1,330,140.00
GREECE	. :	93,640.00	:	•	:	93,640.00	98,322.00
ISRAEL	75,576.32	49,163.00	;	75,576.32	•	49,163.00	51,621.00
ITALY	1,644,861.52	1,003,440.00		1,644,861.52	;	1,003,440.00	1,053,612.00
LEBANON	24,353.29	2,342.00	:	•	:	26,695.29	2,459.00
LIBYA	109,010.80	65,549.00	•	:	:	174,559.80	68,826.00
HALTA	2,949.90	2,342.00	•	:	:	5,291.90	2,459.00
HONACO	10.00	2,342.00	:	•	•	2,352.00	2,459.00
HOROCCO	16,416.17	9,365.00	•	16,416.17	.:	9,365.00	9,833.00
SPAIN	. :	500,054.00	•	•	:	500,054.00	525,057.00
SYRIA	3,762.31	9,365.00	:	•	:	13,127.31	9,833.00
TUNISIA	9,911.65	7,025.00	•	9,820.00	:	7,116.65	7,376.00
TURKEY	(111,043.45)	74,916.00	111,043.45	•	:	*	42,534.55
YUGOSLAVIA	121,762.40	107,690.00	•		:	229,452.40	113,075.00
EEC	•	83,340.00	:	:	:	83,340.00	87,507.00
101AL	2,541,493.20	3,333,561.00	112,487.63	2,374,749.28	•	3,534,988.19	3,464,110.55
EEC VOLUNTARY							
CONTRIBUTION	•	586,708.00	•	•	9 1 1 1 1 1 1 1 1 1	586,708.00	582,541.00
GRAND TOTAL	2,541,493.20	3,920,269.00	112,487.63	2,374,749.28	•	4,121,696.19	4,046,651.55

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Total collections during 1990 as at 31 March 1990 is US\$ 2,374,749.28.

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STATUS OF SIGNATURES NATIFICATIONS OF THE CONVENTION FOR THE MATTER MEDITERRANDARY SEA AGAINST POLLUTION AND ITS RELATED PROTOCOL Status as at 1 March 1990

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Specially Protected Areas(5)	Signature R	E-	-		ස	ଖ	88	83	3 Apr 82			83	3 Apr 82 2		ଥ	. 1	3 Apr 82 2		Mar 83	30 Mar 83 3
	Ratification	11	May 83,	Jrn 88/	May	13 Jul 82/19-R	Jan Jan	i	4 Jul 85	ŀ		Mar	12 Jan 83	9	Ę	!	39 Oct 81	21 Feb 83/AC	į	7 Oct 83/AP
Land-Based Sources(4)	Signature	-		17 May 80		8	88 Ag	Š	ξ.	17 May 80	Š	May 80	May 80	May 80	May 80		17 May 80 ;		i	17 May 80
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1- Convention for the protection of the Mediterranean sea against pollution

Adopted (Barcelona): 16 February 1976
Entry into force: 12 February 1978
The Protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft Adopted (Barcelona): 16 February 1976 4

Adopted (Barcelona): 16 February 1976
Entry into force: 12 February 1978
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 쓔

The Protocol Curcellums — 16 February 1978

Entry into force: 12 February 1978

The Protocol for the protection of the Mediterranean Sea against pollution from land-based sources Adopted (Athens): 17 Aure 1983 4-

The Protocol concerning Mediterranean Specially Protected Areas Adopted (Geneva): 3 April 1982 ሌ

23 March 1996

Accession Approval

Reservation - R

Calendar of Meetings as of 1 April 1990

	Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
:	1990	8-11 Jan.	ITATOTO AGRAFI	T Toftia	TINTETO (OCIA) (ACTO
*	XXIII Meeting of the Inter-Agency Advisory Committee (IAAC) for MED POL	Athens	UNEP-MEDU	L. Jeftic F.S. Civili	UNEP(OCA)/MED WG.11/12
	isultation Meeting on data quality and utilization	12-13 Jan. Athens	UNEP-MEDU/ FAO	L. Jeftic G. Gabrielides	UNEP(OCA)/MED WG 14/1
	Meeting of Directors of Regional Centres	17—19 Jan. Athens	UNEP-MEDU	A.Manos I. Dharat	UNEP(OCA)/MED WG.13/2
	Expert Meeting for the preparation of workshop on historic settlements	5-6 Feb. Split	PAP/RAC UNESCO (UNEP-MEDU)	A. Pavasovic	Issued by PAP/RAC
	DPCU/UNEP-PAP meeting EIA	8-9 Feb.or 26-27 Feb. Split	PAP/RAC DPCU (UNEP-MEDU)	A. Pavasovic	to be issued by PAP/RAC
•	Training course on Marine Oil Pollution	10-19 Feb. Alexandria	ROCC (UNEP-MEDU)	D. Domovic*	to be issued by Malta Centre
*	Meeting of the Bureau of the Contracting Parties (BUR 36)	19-20 Feb. Cairo	UNEP-MEDU	A. Manos* I.Dharat*	UNEP/BUR/36/4

Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
Consultation meeting for the preparation of the X ICSEM/IOC/UNEP Workshop on pollution of the Mediterrranean	27-28 Feb. Athens	UNEP-MEDU	L. Jeftic F.S. Civili	to be issued by MEDU .
PAP-Blue Plan expert meeting on methodology of local scenario for Kastella Bay pilot project	February Split	PAP/RAC Blue Plan (UNEP-MEDU)	M. Grenon* I. Trumbic	to be issued by PAP/RAC
Expert Meeting on Methodology and Programme for Hazard Assessment and Risk Management for Kastella Bay pilot project	5-6 Mar Split	PAP/RAC (UNEP-MEDU)	A. Pavasovic	to be issued by PAP/RAC
Consultation Meeting on measures related to organophosphorus compounds	7-8 Mar. Athens	FAO UNEP-MEDU	G. Gabrielides L. Jetfic	FIR/MEDPOL/ROP/1
Training course of Maltese experts on water resources management	5-17 Mar. Valetta	PAP/RAC Maltese authorities	J. Margeta*	to be issued by PAP/RAC
Training course on sewage treatment plants for big Mediterranean cities	19-28 Mar. Marseille	PAP/RAC City of Marseille (UNEP-MEDU)	S. Tedeschi*	to be issued by PAP/RAC

	Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer Travel marked with *	Report Status
•	International Conference on Marine Eutrophication	21-24 Mar. Bologna	Regione Emilia-Romagna (UNEP-MEDU)	G.Gabrielides* F.S.Civili*	to be issued by Regione Emilia-Romagna
_	Expert Meeting on GIS sea-land interactive model	March Split	PAP/RAC GRID (UNEP-MEDU)	I. Trumbic	to be issued by PAP/RAC
	Training course on Environmental Approach to Energy Planning (pilot projects for Kastella and Rhodes)	2-6 April Split	PAP/RAC	A. Pavasovic	to be issued by PAP/RAC
	Training course on operation and maintenance of liquid waste treatment plants in Mediterranean conditions	9-18 April Sophia Antipolis	CEFRIGE PAP/RAC	S. Tedeschi*	to be issued by PAP/RAC
	International organotin Symposium	17-20 Apr. Monaco	IAEA/ICSEM (FAO/WHO/ UNEP-MEDU)	L. Mee G.Gabrielides*	to be issued by IAEA
•	Intercalibration and training workshop on determination of organotin compounds	17-21 Apr. Monaco	IAEA (FAO/ UNEP-MEDU)	L. Mee G.Gabrielides*	to be issued by IAEA

Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
Expert Meeting to formulate programme of Izmir Bay preliminary study	April Split	PAP/RAC Metropolitan Municipality of Izmir (UNEP-MEDU)	I. Trumbic	to be issued by PAP/RAC
Orientation course on GIS for 8 trainees (CAMPs Rhodes, Izmir, Syria and Tunisia)	April Split (Tentative)	PAP/RAC GRID (UNEP-MEDU)	I. Trumbic A. Burril*	to be issued by PAP/R
Consultation on N.G.O.s	2-3 May Athens	UNEP-MEDU	A. Manos I. Dharat	to be issued by MEDU
Expert Group on Offshore Protocol	7-11 May Athens	UNEP-MEDU IJO	A.Manos I.Dharat	to be issued by MEDU
Training course on the environmental approach to planning and designing of sewage treatment plants in large Mediterranean coastal cities	9-17 May Marseille	PAP/RAC City of Marseille (UNEP-MEDU)	A. Pavasovic*	to be issued by PAP/RAG
Training Course on Harmful Substances MEDIPOL (90)	14-20 May Malta or Brest	Malta Centre (UNEP-MEDU)	J.C. Sainlos	to be issued Malta Centre

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	Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
, ,	Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee	28 May-1 June Athens	UNEP-MEDU	A. Manos L.Jeftic I. Dharat F S. Civili	to be issued by MEDU
	Workshop on Environmental Guidelines for municipal te water reuse in the Mediterranean Region	10-13 June Split	PAP/RAC (UNEP-MEDU)	A. Pavasovic I. Dharat*	to be issued by PAP/PAC
	Workshop on carrying capacity for tourist complexes	7-8 June Paris	PAP/RAC IEO/WTO (UNEP-MEDU)	J. Dragicevic*	to be issued by IEO/WTO
	Consultation Meeting on assessment of pollution by chemical elements and their compounds listed in item 1 of Annex II of the LBS Protocol	12-14 June Athens	FAO/IAEA (UNEP-MEDU)	G.Gabrielides	to be issued by FAO
A	Consultation on guidelines for Monitoring of land-based marine pollution sources	28-30 June Istanbul (Tentative)	WHO (UNEP-MEDU)	L.J. Saliba*	to be issued by WHO
.•		_			
	Workshop on endangered Mediterranean marine plants	June Tunis	SPA/RAC (UNEP-MEDU)	Haj Ali I. Dharat*	to be issued by SPA/RAC

Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
Training workshop on the statistical treatment and interpretation of marine community data	26 Jun-6 Jul. Split	FAO/IOC/ (UNEP/MEDU)	G.Gabrielides*	to be issued by FAO
Training course on protection of Mediterranean Turtles	July Cyprus :	SPA/RAC	Haj Alí*	to be issued by SPA/RAC
Intercalibration and training course on determination of microbiological pollution	3-8 Sept. Malta	WHO (UNEP-MEDU)	L.J. Saliba*	to be issued by WHO
Meeting of the Bureau of the Contracting Parties (BUR 37)	6-7 Sept. Rome	UNEP-MEDU	A. Manos* I. Dharat*	to be issued by MEDU
Consultation meeting on environmental transformation of chemical contaminants	24-28 Sept. La Spezia	FAO (IAEA/ UNEP-MEDU)	G. Gabrielides* L. Mee*	to be issued by FAO
Regional Seminar on Liabilities and Compensation	8-12 Oct. Malta	Malta Centre (UNEP-MEDU)	J.C. Sainlos I. Dharat*	to be issued by Malta Centre
XXXII ICSEM Meeting	15-20 Oct. Perpignan	UNEP-MEDU	L. Jeftic* F.S. Civili*	to be issued by ICSEM

	Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
, , , , , , , , , , , , , , , , , , ,	Consultation Meeting on updated survey on pollution from Land-based sources (MED X-bis)	29 Oct2 Nov. Athens (tentative)	WHO (UNEP-MEDU)	L.J. Saliba	to be issued by WHO
	Consultation Meeting on assessment of pollution by bicides and fungicides	30 Oct-1 Nov. Monaco	TAEA/FAO (UNEP-MEDU)	L. Mee G.Gabrielides*	to be issued by IAEA
	Workshop on transport and dispersion of pollutants in the sea	12-16 Nov. Athens	IOC (UNEP-MEDU)	A.Bousoulengas*	to be issued by IOC
	Consultation meeting on MEDPOL data processing programme	12-16 Nov. Athens	UNEP-MEDU	L. Jeftic A. Aksel	to be issued by MEDU

Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
1991				•
XXIV Meeting of the Inter-Agency Advisory Committee (IAAC)	14-18 Jan. Rome	UNEP-MEDU	L. Jeftic* F.S. Civili*	to be issued . by MEDU
Meeting of the Bureau of the Contracting Parties (BUR 38)	March Brussels	UNEP-MEDU	A.Manos* I.Dharat*	to be issed
Workshop on evaluation of airborne pollution measurements	April France	WMO (UNEP-MEDU)	A. Soudine*	to be issued by WMO
Training Seminar on coastal prospective	May Sophia Antipolis (Tentative)	BP/RAC (UNEP-MEDU)	M. Batisse I. Dharat*	to be issued by BP
Joint Meeting of the Scientific and Technical Committee and the Socio- Economic Committee	May Athens	UNEP-MEDU	A. Manos L. Jeftic I. Dharat F.S. Civili	to be issed
Workshop on effects of pollutants on marine organisms, communities and ecosystems	May Malta	FAO (UNEP-MEDU)	G.Gabrielides*	to be issued by FAO

	Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets),	Responsible officer. Travel marked with *	Report Status
4	Workshop on guidelines and reference method on	May Monaco	IAEA	L.Mee	to be issued by IAEA
7	sample work-up for organic contaminants analysis				
•	Training workshop on tistical treatment and interpretation of marine community data	June Alexandria	FAO/IOC (UNEP-MEDU)	G.Gabrielides*	to be issued by FAO
	Consultation Meeting on guidelines on data quality assurance	September Monaco	IAEA (UNEP-MEDU)	L. Mee	to be issued by IAEA
	Intercalibration and training course on determination of microbiological pollution	September Morocco	WHO (UNEP-MEDU)	L.J. Saliba*	to be issued by WHO
₹	Conference of Plenipotentiaries on Offshore Protocol	Sept/Oct. Athens	UNEP-MEDU	A. Manos I.Dharat	to be issued by MEDU
ĕ -	Meeting of the Bureau of the Contracting Parties (BUR 39)	October Athens/Cairo (Tentative)	UNEP-MEDU	A. Manos I.Dharat	to be issued by MEDU

Meeting	Date, place	Organizer & co-sponsor (co-sponsor in brackets).	Responsible officer. Travel marked with *	Report Status
Seventh Ordinary Meeting of the Contracting Parties to the Convention for the the Protection of the Mediterranean Sea against Pollution and its related Protocols	8-11 October Caíro	UNEP-MEDU	A. Manos* L. Jeftic* I. Dharat* F S Civili*	to be issued, by MEDU
Consultation meeting on the evaluation of monitoring programmes	October Athens	UNEP-MEDU	L. Jeftic F.S. Civili	to be issued by MEDU
Consultation Meeting on pollutants from land- sources in the Mediterranean	29 Oct-2 Nov. Athens	WHO (UNEP-MEDU)	L.J. Saliba	to be issued by WHO
Consultation Meeting on MEDPOL data processing programme and guidance for future work	November Monaco	UNEP-MEDU	L. Jeftic* A. Aksel*	to be issued by MEDU
Consultation Meeting on health effects of chemical contaminants in Mediterranean seafood	November Padova (Tentative)	WHO (UNEP-MEDU)	L.J. Saliba*	to be issued by WHO