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MEDITERRANEAN ACTION PLAN

XXV Meeting of the Inter-Agency
Advisory Committee (IAAC) for MED POL

Athens, 2-5 December 1991

REPORT

OF THE XXV MEETING OF THE INTER-AGENCY ADVISORY COMMITTEE (IAAC) FOR MED POL

UNEP
Athens, 1991

CONTENTS

The XXV IAAC Meeting was held in Athens from 2 to 5 December 1991. The list of participants is attached as Annex I.

Agenda Item 1: Opening of the Meeting

1. The meeting was opened by Mr S. Busuttil, the newly appointed Co-ordinator of the Mediterranean Action Plan, who welcomed the participants and expressed the wish to continue and further expand the co-operation with the International Organizations who had provided the basic support of the entire MED POL programme.

Agenda Item 2: Organization of work

2. The participants agreed that, as in the past, Mr L. Jeftic, Senior Marine Scientist, would act as chairman and Mr F. Saverio Civili, Marine Scientist, would act as technical secretary and rapporteur.

Agenda Item 3: Adoption of the Agenda

3. The Agenda as adopted appears as Annex II to this Report.

Agenda item 4: Monitoring activities

4. Two information documents were introduced by the secretariat on the status of monitoring agreements and data reported. The first one (Annex III) reported on the MED POL monitoring agreements signed, the parameters proposed and the data actually received by the Med Unit. The second document (see Agenda item 6.) described certain data actually entered into the MED POL data bank and it compared the data received and entered with the work agreed upon in the MED POL agreement. The committee considered the latter as an important tool to evaluate the performance of each country in the MED POL monitoring programme.

5. A detailed discussion was held on how to improve the preparation of monitoring agreements as well as the analysis and processing of the data. The Committee agreed that, while it was necessary to continue to work on the design of the new MED POL programme after 1995 (see Agenda item 14.), on the short-term both the monitoring agreements and the procedure for the data analysis had to be revised in order to ease the processing of the data. The following was decided:

a) Monitoring agreements: it was agreed that each co-operating Agency would analyse the latest monitoring agreement of each country with a view to improving its presentation and its scientific significance (selection of parameters, frequency, etc.). Comments and suggestions should be forwarded to the Med Unit by the end of January 1992. As from 1992 all agreements should be prepared on the basis of new agreed formats for the presentation of those information indispensable for the computer entry (Annex IV).

b) Analysis of data reported: A procedure for the analysis of monitoring data reported by countries was agreed upon and it was decided that it should be strictly followed as described in the attached flow diagram (Annex V). As to the time span presented in the diagram it was clear that it applied to Agencies with offices in Athens. In the case of other Agencies an allowance would be made for postage time. In addition it was agreed that for technical informations Agencies could still contact directly the Institutions involved.

6. A more rigorous approach was also considered indispensable in the provision of monitoring assistance to countries. The respect of the deadlines set in the past - and regularly reminded to National Co-ordinators - regarding the presentation of the yearly monitoring programme (15 November of each year for the following year) and regarding the transmission of data (end of May of each year for the data of the preceding year) should be a condition to the provision of the financial assistance.

7. In reviewing the implementation of the pilot monitoring exercises, the FAO representative informed the Committee that the pilot project on herbicides had started during 1991 and the one on fungicides would start when funds would be made available. The WHO representative reported that the pilot project on detergents would be completed by the end of 1992.

Agenda item 5: Supporting activities

8. The implementation of the MED POL supporting activities was reviewed by the Committee. It was noted that, also thanks to the cooperation with METAP, the training activities at IAEA/MESL had been particularly intense (28 trainees in 1991). The Data Quality Assurance programme had shown promising prospectives for Albania and contacts had been again taken with Algeria. To the contrary, Morocco and Egypt had made no progress. Especially in the case of Egypt, where the AAS purchased through METAP was going to be installed, the lack of positive response (no data provided) was considered particularly grave also considering the large efforts made (numerous Data Quality Assurance missions and US$ 120,000 provided between 1990 and 1991 as MED POL contribution). In this connection, a letter to the Egyptian National Co-ordinator should be prepared pointing out what was said above. As to the maintenance programme, it was noted that while on the one hand during 1991 the number of service visits had been somehow smaller than previous years, on the other hand the organization of the first training course on instruments servicing was to be considered a great success.

Agenda item 6: Data Processing

9. Mr A. Aksel introduced the discussion on a number of issues concerning the further development and use of the MED POL data bank. The reviewed subjects are as follows.

10. Review/update of codes: Relevant codes have been reviewed and updated with some structural changes (see Annex VI).

11. Monitoring agreements: The Committee noted that the agreements were up to date in terms of computerization. Relevant computer structures would be updated in line with the decisions made in Agenda item 4a) (utilization of new formats). Annex VII contains sample printouts of the current computerized agreements.

12. Monitoring data, reporting forms: The Committee noted that 85 to 90 percent of all micro-organism data in sea water, and heavy metals/halogenated hydrocarbon data (in all matrices) had been computerized. Furthermore, participants were informed on the completed transfer of all MED POL Phase I heavy metal & halogenated hydrocarbon data (in biota and plankton). Monitoring data computerization would be continued in line with the decisions taken in Agenda item 4b) (establishment of data flow mechanism, vital data components for each element/compound group and matrix). For sample printouts on micro-organisms, heavy metals, halogenated hydrocarbons see Annex VIII. The current status of data reporting forms was discussed. For updated list of forms see Annex IX.

13. Analysis and presentation of the inventories: The Committee noted that initial contacts, followed by contracts with consultants on the evaluation of micro-organism, heavy metal and halogenated hydrocarbon data had been made. With the introduction of Phase I heavy metal and halogenated hydrocarbon data into the inventories, trends would be studied for over 15 years. Participants were informed on the pending arrival of the new version of AQUAMARE software (assessment of water quality, evaluation of microbial pollution). Assessment of heavy metal and halogenated hydrocarbon pollution had started with Yugoslav data, and would be followed by Cyprus, Israel, and Malta in January. Two statistical analysis software packages (SYSTAT and STATGRAPHICS) and also the ATLAS*GIS (a desktop GIS/mapping software) were purchased and their use had begun.

14. Computerized MED POL Marine Pollution Control Database Guidelines/Manual: The Committee noted that preparation of the first draft of the guidelines/manual was nearly completed. It would be ready by January 1992.

15. Workplan for 1992: Data entry, and the design/implementation of missing structures will continue in line with the decision taken in Agenda item 4b). Furthermore, the data processing workplan has been prioritized for 1992 as follows:

- Transfer of the raw data to consultants (as per 4b);

- Carrying out the necessary application changes as decided above;

- Completion of the computerized data inventories of heavy metal, halogenated hydrocarbon and micro-organism data;

- Continuation of data entry of new Monitoring Agreements;

- Verification and updating missing institute and analyst information from the existing computerized inventory;

- Dissemination of 'Computerized MED POL Marine Pollution Control Database Guideline/Manual' to the Agencies (to be commented upon by February 1992) and to highly cooperating institutes for its review; preparation of final draft; distribution of final draft to all Mediterranean institutes; its constant review;

- Analysis and presentation of heavy metal, halogenated hydrocarbon and micro-organism data together with related Agencies and the consultants;

- Analysis and presentation of Monitoring Agreements;

- Transfer of the remaining Phase I data;

- Completion and data entry of the missing applications (to be prioritized according to the monitoring data received and consultants' work progress).

Agenda item 7: Research activities

16. The Committee reviewed a document containing a list of the on-going projects as at December 1991, a list with the newly submitted projects and a list of the projects not yet initiated (Undecided) (Annex X). The Committee decided that decisions regarding the acceptance of the new projects submitted for 1992 should be communicated to National Co-ordinators without delays.

17. The Committee discussed the procedures for implementation of the research activities on eutrophication and plankton bloom which, as decided by the Contracting Parties, should be implemented as part of a regional programme and should receive half of the funds earmarked for MED POL research (for 1992 US$ 140,000). It was agreed that as an immediate step a small consultation meeting (3/4 scientists) should be planned for the beginning of 1992 at which a detailed workplan for the implementation of the various activities should be finalized. In the meantime, individual research projects should be selected among on-going projects, solicited projects and new projects submitted for 1992. At the end of the first year a review meeting would analise and discuss the progress of work. The WHO representative informed the meeting that a precise workplan was going to be prepared on health effects of eutrophication and plankton blooms at a meeting to be held in Athens from 10 to 14 December 1991. He said that the meeting would generate a number of related projects which will be part of the regional programme.

Agenda item 8: LBS implementation workplan

18. The Committee reviewed the list of activities concerning the implementation of the LBS protocol. The list was updated and it is presented as Annex XI to this report.

Agenda item 9: Meetings

19. The Committee prepared a tentative list of meetings for 1992 and 1993 which is presented as Annex XII to this report.

Agenda item 10: Documentation

20. The status of the preparation of reference methods related to the implementation of the monitoring activities was reviewed and an updated list appears as Annex XIII to this report.

21. The Committee took note of the volumes of the MAP Technical Report Series published in 1991 and agreed on a number of volumes to be prepared in 1992 (see Annex XIV).

Agenda item 11: Climatic Changes

22. Mr Jeftic gave a short overview of the activities on implications of climatic changes in the Mediterranean Region. He reviewed developments on six site specific case studies (Island of Rhodes, Kastela Bay, Island of Malta, Syrian Coast, Cres/Losinj islands and Izmir Bay). He also informed the meeting of the final report on "Regional changes in climate in the Mediterranean Basin due to global greenhouse gas warming", prepared by Climatic Research Unit, University of East Anglia, Norwich U.K.

Agenda item 12: Review of decisions

23. The main decisions regarding MED POL activities which had been made at the 1991 Intergovernmental Meeting held in Cairo, at the 1991 Joint Committees' meeting and at the XXIV IAAC Meeting were reviewed and a list including specific activities to be implemented during the 1992-1993 biennium was prepared. The list is attached as Annex XV to this report.

Agenda item 13: Preparation of 1992 National Co-ordinators Meeting

24. The Committee discussed the preparation of the 1992 MED POL National Co-ordinators Meeting and agreed on a tentative agenda (see Annex XVI). It was

decided that the dates for the Meeting would be from 6 to 9 May 1992 and, as a result, all input from Co-operating Agencies towards the preparation of documents should be sent to the Med Unit not later than the end of February 1992. The progress report on the activities should cover the period January-December 1991.

Agenda item 14: Budget for 1992 activities

25. The Committee took note of the budget approved by the Contracting Parties for the biennium 1992-1993 and agreed on activities and budget for 1992 (see Annex XVII). As to the funds earmarked for monitoring assistance the following attributions were made: FAO = US$ 145,000, WHO = US$ 145,000, WMO = US$ 60,000.

26. As to research activities the following distribution of funds was made:

For research activities on eutrophication: FAO = US$ 51,000, WHO = US$ 36,000, IOC = US$ 20,000, WMO = US$ 20,000 and IAEA = US$ 13,000.

For other research activities: FAO = US$ 49,000, WHO = US$ 49,000, IOC = US$ 24,000, WMO = US$ 4,000 and IAEA = US$ 14,000.

Agenda item 15: Preparation of new phase of MED POL

27. In view of the decision of the Contracting Parties to start discussing in 1993 new proposals for a new phase of MED POL, the Committee reviewed what had been done so far and discussed on how to proceed in the future. The Committee recalled that the analysis of achievements and failures of MED POL-PHASE II had started in 1989 with an evaluation of the available monitoring data on heavy metals, petroleum and halogenated hydrocarbons and microbial pollution. Subsequently, the structure of the 1990 ICSEM/IOC/UNEP Workshop on Pollution of the Mediterranean had been specifically modified to focus the discussion on future monitoring strategies and research priorities.

28. The FAO representative presented to the Committee some first views on how the future MED POL, and in particular the monitoring component, may be structured. He stated that MED POL-PHASE III monitoring should be redesigned to meet specific objectives and upgrade national capabilities in order to enable decision makers to make use of the monitoring data. He basically indicated five specific objectives which could be still modified by countries according to local needs or problems: 1) protection of human health (health related monitoring); 2) the protection of marine life and living resources (biological effects monitoring); 3) the assessment of efficiency of measures taken (trend monitoring); 4) the assessment of existing levels of pollution (spatial distribution monitoring); 5) the assessment of inputs of contaminants (load monitoring).

29. The IOC representative presented the planned developments of the MARPOLMON programme which could be also applied in the MED POL programme. He stated that while the most universal environmental issues were 1) sewage and

pathogens, 2) erosion, turbidity and siltation, 3) eutrophication, for the Mediterranean in particular MARPOLMON also suggested to consider issues like marine litter, sea level change and atmospheric input of contaminants.

30. The IAEA representative expressed the opinion that before the end of Phase II an exercise comparable to the "mussel watch" programme should be launched in the Mediterranean in order to close the phase with at least some reliable data on areas where the monitoring data were scarce. The exercise would also serve the purpose of the Data Quality Assurance programme.

31. In discussing a precise workplan for the design of the MED POL-PHASE III it was agreed that by the end of February 1992 all Agencies should forward to the Med Unit a written paper with ideas and proposals for the new phase; one/two days before the National Co-ordinators Meeting in May an Inter-Agency Meeting would be held to finalize a draft programme prepared in advance; a final document would be prepared by the Med Unit for the Monitoring Meeting in November/December (to be held in connection with a IAAC Meeting) where final decisions on the structure of the new programme would be made.

Agenda item 16: Terminal reports and Progress reports

32. The Committee took not of the fact that the closing revision of project 5101-81-01 had not yet been operated since terminal reports had not been submitted by IOC and IAEA. The Committee agreed that by the end of February 1992 the missing terminal reports should be sent to the Med Unit without further delay.

Agenda item 17: Other business

33. The secretariat informed the Committee of the new ICSEM/IOC/UNEP Workplan on Pollution of the Mediterranean which would be held in Trieste in October 1992. This year the two subjects chosen for the Workshop would be Data Quality Assurance and Eutrophication and Plankton Blooms. The subjects would be introduced by Key-note speakers and would be followed by a general debate. As in the past the Med Unit would use US$ 30,000 for travel grants for the attendance of Mediterranean scientists mostly from developing countries.

Agenda item 18: Adoption of the Report

34. The Committee adopted the report of the XXV IAAC Meeting on Thursday 5 December 1991.

Agenda item 19: Closure of the Meeting

35. Mr L. Jeftic closed the Meeting at 13,30 hours of 5 December 1991.

ANNEX I

LIST OF PARTICIPANTS

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS	Mr Gabriel P. Gabrielides Senior Fishery Officer (Marine Pollution) FAO Project Office Co-ordinating Unit for the Mediterranean Action Plan Leoforos Vassileos Konstantinou 48 P.O. Box 18019 11610 Athens Greece Tel: 1 7236586, 1 7244536 Tlx: 222611, 222564 MEDU GR Cable: UNITERRA ATHENS Fax: 1 7291160
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ANNEX II

AGENDA

1. Opening of the meeting

2. Organization of work

3. Adoption of the Agenda

4. Monitoring activities

   a) National Monitoring Programmes
   b) Reports from countries
   c) Assistance to countries
   d) Pilot monitoring exercises

5. Supporting activities

   a) Data Quality Assurance
   b) Intercalibration
   c) Maintenance

6. Data Processing

   a) MED POL Codes
   b) Monitoring Agreements
   c) Data Reports
   d) Analysis and Presentation of Inventories
   e) Workplan for 1992-1993
   f) Computerization Guidelines/Manual

7. Research activities

   a) On-going projects
   b) 1992 projects
   c) Projects on eutrophication and plankton blooms

8. LBS implementation workplan

9. Meetings

   a) 1992 meetings
   b) 1993 meetings

10. Documentation

    a) Reference methods
    b) MAP Technical Reports Series

11. Climatic changes

12. Review of decisions

    a) Cairo Meeting
    b) 1991 Scientific and Technical Committee
    c) XXIV IAAC

13. Preparation of 1992 National Co-ordinators Meeting

14. Budget for 1992 activities

    a) Overall budget for 1992-1993
    b) Project revision n.6 (5101/89-02)

15. Preparation of new phase of MED POL

16. Terminal Reports and Progress Reports

17. Other business

18. Adoption of report

19. Closure of the meeting

ANNEX III

STATUS OF MED POL MONITORING AGREEMENTS/REPORTS

AS OF DECEMBER 1991

Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
ALBANIA	**1991**	X	X	X	X	X	X	X	X	-	*	*	*	*	*	*	*	*	*
ALGERIA	**1984**	X	X	X	X	X	-	X	X	-	*	*	*	*	*	*	*	*	*
	1985																		
	1986	-	-	X	X	X	X	X	X	-	*	*	*	*	X	#	X	*	*
	1987	-	-	X	X	X	X	X	X	-	*	*	#	#	X	*	*	*	*
	1988	-	-	X	X	X	X	X	X	-	*	*	*	*	X	*	*	*	*
	1989	X	-	X	X	X	X	X	X	-	#	#	#	#	X	*	*	*	*
	1990										#	#	#	#	#	*	#	#	*
CYPRUS	**1983**	-	-	X	X	-	X	X	X	-	*	*	#	#	*	#	#	X	*
	1984	-	X	X	X	X	X	X	X	-	*	*	#	#	*	#	-	X	*
	1985	-	X	X	X	X	X	X	X	-	*	*	*	*	X	#	*	X	*

The year in which the country submitted its first programme is in **bold**.

Abbreviations/Key:
A = Airborne
MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other
X = Programme proposed/Data received
# = Limited data received

Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
CYPRUS	1986	-	X	X	X	X	X	X	X	-	-	-	#	#	X	#	#	X	-
	1987	-	X	X	X	X	X	X	X	-	-	-	#	#	X	#	#	X	-
	1988	-	X	X	X	X	X	X	X	-	-	-	#	#	X	#	X	X	-
	1989	-	-	X	X	X	X	X	X	X	-	-	#	#	X	X	X	X	-
	1990	-	-	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-
	1991	X	-	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-
EGYPT	**1986**	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-
	1987																		
	1988															X			
	1989	X	X	X	X	X	X	X	X	-	-	-	-	#	#	#	#	#	-
	1990	X	X	X	X	X	X	X	X	-	-	-	-	-	#	-	-	-	-
	1991	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-

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		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
FRANCE	1983															X	X	X	
	1984																		
	1985																		
	1986																		
	1987														X				
GREECE	1982														X				
	1983														X				
	1984														X				
	1985														X	X	X	X	
	1986														X	X	X	X	
	1987														X	X	X	X	
	1988	X	X	X	X	X	X	X	X	-	-	-	-	-	X	X	X	X	-
	1989	-	-	-	-	X	X	X	X	-	-	-	-	-	-	-	X	X	-

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		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
GREECE	1990										-	-	-	-	-	-	-	#	-
ISRAEL	1982																X		
	1983	-	-	-	-	X	-	X	X	-	-	-	-	-	X	-	X	-	-
	1984	-	-	-	-	X	-	X	X	-	-	-	-	-	X	-	X	-	-
	1985	-	-	-	-	X	-	X	-	-	-	-	-	-	X	-	X	X	-
	1986	-	-	-	-	X	-	X	-	-	-	-	-	-	X	-	X	-	-
	1987	-	-	-	-	X	-	X	-	-	-	-	-	-	X	-	X	-	-
	1988	-	-	-	-	X	-	X	-	-	-	-	-	-	X	-	X	-	-
	1989	-	-	-	-	X	-	X	-	X	-	-	-	-	X	-	X	-	-
	1990	-	-	-	-	X	-	X	-	X	-	-	-	-	X	-	X	-	-
	1991	-	-	-	-	X	-	X	-	X	-	-	-	-	-	-	-	-	-
ITALY	1987														X	X	X	X	

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		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
ITALY	1988														X	X	X	X	
	1989														X	X	X	X	
	1990														X		X	X	
	1991														X		X	X	
LEBANON	**1983**	-	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-
	1984														X	X	X		
	1985	-	-	-	-	X	X	X	X	-	-	-	-	-	X	#	X	-	-
	1986	-	-	-	-	X	X	X	X	-	-	-	-	-	X	#	#	-	-
	1987	-	-	-	-	X	X	X	X	-	-	-	-	-	X	#	#	-	-
	1988	-	-	-	-	X	X	X	X	-	-	-	-	-	X	X	X	-	-
	1989	-	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-
	1990																		
	1991	-	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-

The year in which the country submitted its first programme is in **bold**.

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		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
LIBYA	**1986**	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-	-	-	-
	1987																#	#	
	1988																		
	1989																#	X	
MALTA	1982														#				
	1983											#	#		X				
	1984	X	X	X	X	X	X	X	X	-	-	#	#	#	X	X	X	#	-
	1985	X	X	X	X	X	X	X	X	-	#	#	#	#	X	X	X	#	-
	1986	-	X	X	X	X	X	X	X	-	#	#	#	#	X	X	X	#	-
	1987	-	X	X	X	X	X	X	X	-	-	#	#	#	X	X	X	#	-
	1988	-	X	X	X	X	X	X	X	-	-	#	#	#	X	X	X	#	-
	1989	-	X	X	X	X	X	X	X	-	-	#	#	#	X	X	X	#	-
	1990	X	X	X	X	X	X	X	X	-	-	#	#	#	X	X	X	#	-

The year in which the country submitted its first programme is in bold

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Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
MALTA	1991	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-
MOROCCO	1983										-	#	#	#	X	#	#	X	-
	1984	X	X	X	X	X	X	X	X	-	-	#	#	#	#	#	X	-	-
	1985										-	X	X	X	X	X	X	-	-
	1986	X	X	X	X	X	X	X	X	-	-	X	X	X	X	-	X	X	-
	1987	X	X	X	X	X	X	X	X	-	-	X	X	X	X	X	X	X	-
	1988	X	X	X	X	X	X	X	X	-	-	X	X	X	X	X	X	X	-
	1989										-	X	X	X	X	-	-	X	-
	1990										-	-	-	X	X	-	-	X	-
SPAIN	1981														X	X	X	X	
	1982														X	X	X	X	
	1983														X	X	X	X	

The year in which the country submitted its first programme is in **bold**.

Abbreviations/Key:
A = Airborne
MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other
X = Programme proposed/Data received
\# = Limited data received

Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
SPAIN	1984														X	X	X	X	
	1985														X	X	X	X	
	1986																		
	1987																		
	1988														X	X	X	X	
	1989															X	X	X	
SYRIA	**1986**	X	-	X	X	X	-	X	X	-	-	-	-	-	#	#	#	X	-
	1987	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-	-	-	-
	1988	X	-	X	X	X	-	X	X	-	-	-	-	-	X	-	#	-	-
	1989	-	-	-	-	X	X	X	X	-	-	-	-	-	#	-	X	-	-
	1990	-	-	-	-	X	X	X	X	-	-	-	-	-	X	-	X	-	-
	1991	-	-	-	-	X	X	X	X	-	-	-	-	-	X	-	X	-	-

The year in which the country submitted its first programme is in **bold**.

Abbreviations/Key:
A = Airborne
MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other
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Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
TUNISIA	1981															#	#		
	1982															#	#		
	1983															#	#		
	1984															#	#		
	1985															#	#		
	1986															#	#		
	1987															#	#		
	1988																		
	1989	-	-	X	X	X	X	X	X	-	-	-	-	-	#	-	#	-	
	1990	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	#	-	
	1991	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	
TURKEY	1983										X		X	X	X		X	X	
	1984										X		X	X	X	X	X	X	

The year in which the country submitted its first programme is in bold

Abbreviations/Key:
A = Airborne
MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other
X = Programme proposed/Data received
# = Limited data received

Status of MEDPOL Monitoring Agreements/Reports as of December 1991

		PROGRAMME COVERAGE									DATA SUBMISSION								
		SOURCES				COASTAL/REFERENCE				A	SOURCES				COASTAL/REFERENCE				A
COUNTRY	YEAR	MC	HH	HM	O	MC	HH	HM	O		MC	HH	HM	O	MC	HH	HM	O	
TURKEY	1985														X	#	X	X	
	1986														X		X	X	
YUGOSLAVIA	**1983**	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1984	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1985	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1986	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1987	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1988	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	1989	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-
	1990	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-
	1991	X	X	X	X	X	X	X	X	X									

The year in which the country submitted its first programme is in **bold**

Abbreviations/Key:
A = Airborne
MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other
X = Programme proposed/Data received
# = Limited data received

ANNEX IV

FORMAT FOR 1992 MONITORING AGREEMENTS

I. MONITORING AGREEMENT AREAS AND STATIONS
(General Characteristics)

AREA*		STATION											
ID (6)	Denomination (30)	ID (6)	T (2) **	Location (30)	Latitude (DD,MM,SS,P)				Longitude (DDD,MM,SS,P)				

Shaded columns indicate minimum required information.

* The Area need only be written once for each set of stations located within that area.
** T = station type code. For a list of codes, see Station Types list.

II. a. MONITORING AGREEMENT STATIONS (excluding sources of pollution/effluent stations) (Specific Characteristics)

IDENTIFICATION			CHARACTERISTICS				
Area ID (6)	Station ID (6)	Type (1)*	Bottom Depth (m) (6.1)*	Shore Distance (m) (6.1)	Beach Type (1)**	Elevation (m)(6.1)***	Distance to Nearest Meteorological Station (m)(6.1)***

Shaded columns indicate minimum required information.

* Height (elevation) for Airborne stations.
** Rocky or Sandy, bathing (recreational) stations only.
*** Airborne stations only.

II. b. MONITORING AGREEMENT STATIONS (sources of pollution/effluent stations) (Specific Characteristics)

IDENTIFICATION		CHARACTERISTICS				
Area ID (5)	Station ID (4)	Source Code (2)*	Annual Average Discharge (m^3)	Average Flow (m^3/hour)	Local Population (in thousands)(6.1)	Activity Group (11)**

Shaded columns indicate minimum required information.

* See Effluent Sources list.
** See Industrial Activity Groups list.

III. a. MONITORING AGREEMENT - RESPONSIBLE INSTITUTES

No.	Institute Name (80) * (In English or French)	Address	Correspondence (Tel,Fax,Tlx)	Main Monitoring Activity (60)	Higher Body (80)* (In English or French)

Shaded columns indicate minimum required information.

* Institute and higher body should include city name.

III. b. MONITORING AGREEMENT - RESPONSIBLE PERSONS

Ins. No.	Person's Name (40)	R*	F**	Main Monitoring Activity (60)

Shaded columns indicate minimum required information.

* R = responsibility. For a list of codes see Person's Monitoring Responsibility Codes list.
** F = function. Analysis, Sampling, or Both.

IV. MONITORING AGREEMENT SAMPLING

IDENTIFICATION			SAMPLING INFORMATION									
Area ID (8)	Station ID (8)	T (1)	Matrix		Par/Grp (5)***	Freq †		Variation ††		Sampling Depth (20)	Sampler (10)	Institute
			M (2)*	C (3)**		F (1)	No (4)	Sta (3)	End (3)			

Shaded columns indicate minimum required information.

* M = matrix. See Matrix Identification list.

** C = code. If matrix is Biota then enter the biota or biota group code, see Biota Types and Biota Groups list. If matrix is Plankton, then enter Phytoplankton or Zooplankton.

*** Par/Grp = Parameter or group code. See the Parameter/Group Codes list.

† Freq = Sampling frequency. See Monitoring Frequencies list. If sampling occurs at regular intervals annually, then enter code only. Otherwise, enter X for the code and provide the No. (number).

†† Irregular, periodic sampling. Enter the beginning and ending months (first three letters of the month in english). (Only valid if X = frequency.)

V. MONITORING AGREEMENT INSTRUMENTS

Ins. No.	Instrument				Parameter Groups*			
	Identification (50)	Make (20)	Model (20)	Yr	1	2	3	4

Shaded columns indicate minimum required information.

* Enter up to 4 parameter group codes. See Parameter Groups list.

I. MONITORING AGREEMENT AREAS AND STATIONS (General Characteristics)

AREA*		STATION											
ID (6)	Denomination (30)	ID (6)	T (1) **	Location (30)	Latitude (DD,MM,SS,P)				Longitude (DDD,MM,SS,P)			
YU1	Gulf of Trieste	STA1	C	Zavian	41	35	06	N	013	42	24	E
		STA2	S	Shipyard	41	52	00	N	013	20	00	E
		STA3	B	-	41	55	00	N	013	12	00	E
YU2	-	SI	R	Lastovo	41	43	00	N	013	22	00	E
		RA	B	Portoroz	41	23	43	N	013	21	00	E
		S1	H	-	41	34	03	N	013	56	00	E
		8E	S	Close to plant outlet	41	31	27	N	013	37	00	E
		A1	A	Hvar	45	15	00	N	013	25	00	E
		A2	A	Sibenik	45	16	00	N	013	24	00	E
		ES1	E	Krka Estuary	43	15	00	N	013	35	00	E

Shaded columns indicate minimum required information.

* The Area need only be written once for each set of stations located within that area.
** T = station type code. For a list of codes, see Station Types list.

II. a. MONITORING AGREEMENT STATIONS (excluding sources of pollution/effluent stations) (Specific Characteristics)

IDENTIFICATION			CHARACTERISTICS				
Area ID (6)	Station ID (6)	Type (1)*	Bottom Depth (m) (6.1)*	Shore Distance (m) (6.1)	Beach Type (1)**	Elevation (m)(6.1)***	Distance to Nearest Meteorological Station (m)(6.1)***
YU1	STA1	C	-	12.0	-	-	-
	STA3	B	0.2	0.5	R	-	-
YU2	SI	R	450.0	1200.0	-	-	-
	RA	B	0.1	-	S	-	-
	S1	H	3.0	8.0	-	-	-
	A1	A	20.5	1800.0	-	50.0	4500.0
	A2	A	6.7	2000.0	-	32.0	50000.0
	ES1	E	0.3	2.0	-	-	-

Shaded columns indicate minimum required information.

* Height (elevation) for Airborne stations.
** Rocky or Sandy, bathing (recreational) stations only.
*** Airborne stations only.

II. b. MONITORING AGREEMENT STATIONS (sources of pollution/effluent stations) (Specific Characteristics)

IDENTIFICATION		CHARACTERISTICS				
Area ID (5)	Station ID (6)	Source Code (2)*	Annual Average Discharge (m^3)	Average Flow (m^3/hour)	Local Population (in thousands)(6.1)	Activity Group (3)**
YU1	STA2	IN	22000000	-	5.1	B
YU2	8E	IN	-	80	-	A

Shaded columns indicate minimum required information.

* See Effluent Sources list.
** See Industrial Activity Groups list.

III. a. MONITORING AGREEMENT - RESPONSIBLE INSTITUTES

No.	Institute Name (180) * (In English or French)	Address	Correspondence (Tel,Fax,Tlx)	Main Monitoring Activity (60)	Higher Body (80)* (In English or French)
1	*Centre for Marine Research, ROVINJ*	*G. Paliaga 5 52210 ROVINJ Yugoslavia*	*(052) 811567 (Tel) 811544 (Tel)*	*Effluent, Coastal, Heavy Metals*	*"Ruder Boskovic" Institute, ZAGREB*
2	*Centre for Marine Research, ZAGREB*	*P. O. Box 1016 Bijenicka 54, 41001 ZAGREB, Yugoslavia*	*(041) 435111 (Tel) 21183 YU IRB (Tlx)*	-	*"Ruder Boskovic" Institute, ZAGREB*
3	*Institute for Oceanography and Fisheries, SPLIT*	*P. O. Box 114 Mose Pijade 63, 58001 SPLIT, Yugoslavia*	*(058) 46688 (Tel)*	*HH & HM in sea water*	-

Shaded columns indicate minimum required information.

* Institute and higher body should include city name.

III. b. MONITORING AGREEMENT - RESPONSIBLE PERSONS

Ins. No.	Person's Name (40)	R*	F**	Main Monitoring Activity (60)
1	*Ms V. Turk*	*RI*	*A*	*Micro-organisms in water*
1	*Mr M. Planinc*	*RI*	*S*	*Trace metals in water, sediment and biota*
2	*Ms V. Zatic*	*CO*	*B*	-
2	*Mr A. Skrivanic*	*RI*	*A*	*Effluents*
2	*Ms Z. Kozarac*	-	*S*	*Detergents in water*
3	*Mr B. Stjepcevic*	*RI*	-	*FC in water and biota*
3	*Ms M. Dutina*	-	*A*	*Halogenated hydrocarbons in water*

~~Shaded columns indicate minimum required information.~~

* R = responsibility. For a list of codes see Person's Monitoring Responsibility Codes list.
** F = function. Analysis, Sampling, or Both

IV. MONITORING AGREEMENT SAMPLING

IDENTIFICATION			SAMPLING INFORMATION									
Area ID (8)	Station ID (6)	T (1)	Matrix		Par/Grp (5)***	Freq†		Variation††		Sampling Depth (20)	Sampler (10)	Institute
			M (2)*	C (3)**		F (1)	No (4)	Sta (3)	End (3)			
YU1	STA1	C	SW	-	CD	M	-	-	-	Surface	-	1
			SW	-	HH	M	-	-	-	20 cm.	-	3
			PL	Z	PB	F	-	-	-	0.1 m	-	1
YU1	STA2	S	EF	-	BOD5	X	8	JUN	SEP	-	-	1
			EF	-	HGT	X	4	SEP	DEC	-	-	3
YU1	STA3	B	SA	-	TAR	D	-	-	-	-	-	2
YU2	SI	R	AI	-	PHC	C	-	-	-	-	-	2
			AI	-	SO2	D	-	-	-	-	-	1
			BI	MB	HGO	W	-	-	-	-	-	1
YU2	RA	B	SM	-	CD	Y	-	-	-	-	-	1
			SD	-	PB	B	-	-	-	-	Core	1
			SD	-	HGT	S	-	-	-	-	Grab	2
			SW	-	BAC	X	90	JUN	AUG	Surface	-	1

Shaded columns indicate minimum required information

* M = matrix. See Matrix Identification list.

** C = code. If matrix is Biota then enter the biota or biota group code, see Biota Types and Biota Groups list. If matrix is Plankton, then enter Phytoplankton or Zooplankton.

*** Par/Grp = Parameter or group code. See the Parameter/Group Codes list.

† Freq = Sampling frequency. See Monitoring Frequencies list. If sampling occurs at regular intervals annually, then enter code only. Otherwise, enter X for the code and provide the No. (number).

†† Irregular, periodic sampling. Enter the beginning and ending months (first three letters of the month in english). (Only valid if X = frequency.)

V. MONITORING AGREEMENT INSTRUMENTS

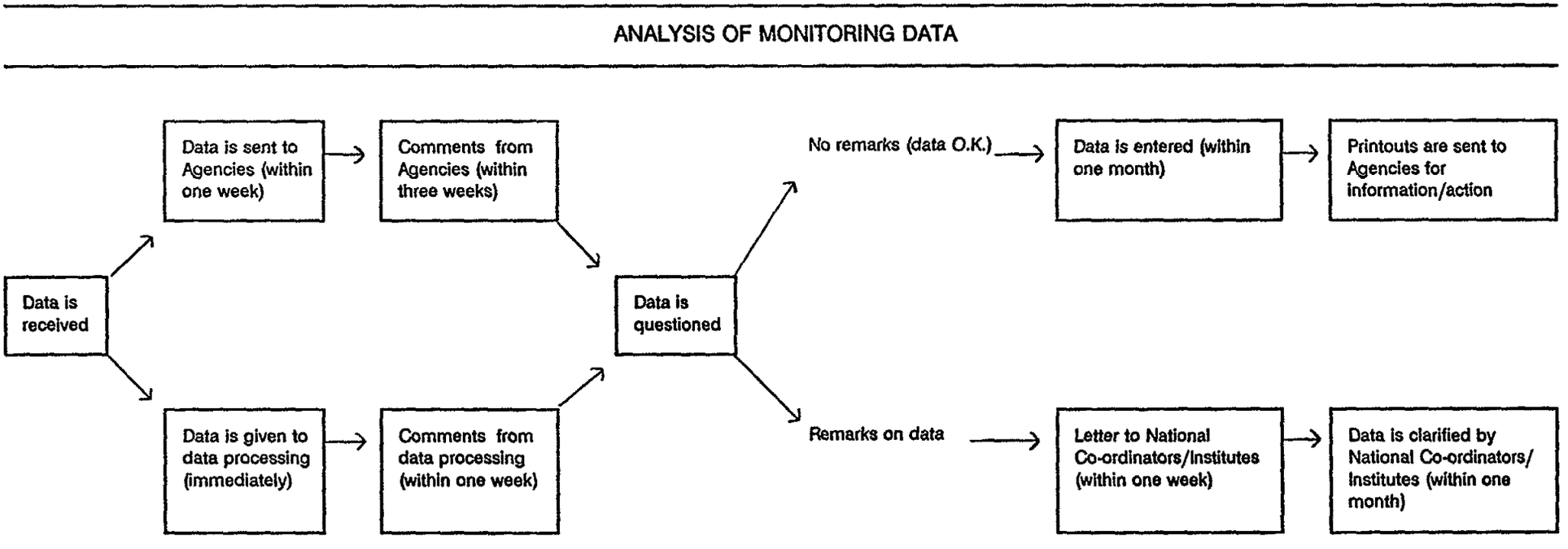
Ins. No.	Instrument				Parameter Groups*			
	Identification (60)	Make (20)	Model (20)	Yr	1	2	3	4
1	Atomic absorption spectrophotometer	Pye Unicam	SP-9	86	HM	-	-	-
1	Atomic absorption spectrophotometer	Perkin Elmer	609	89	HM	-	-	-
1	Fluorimeter	Turner	430	87	PH	-	-	-
1	Spectrophotometer	Pye Unicam UV/VIS	8620	88	EF	-	-	-
2	Gas chromatograph	Hewlett Packard	5710	88	-	-	-	-
2	Atomic absorption spectrophotometer	Pye Unicam	SP-9	86	HM	-	-	-

Shaded columns indicate minimum required information.

* Enter up to 4 parameter group codes. See Parameter Groups list.

ANNEX V

FLOW DIAGRAM FOR DATA ANALYSIS PROCEDURE



ANNEX VI

MED POL CODES

List 1

MATRIX IDENTIFICATION	
Matrix Code	Description
AI	Air
BI	Biota (exc.Plankton)
EF	Effluent
PL	Plankton
PR	Precipitation
SA	Seashore
SD	Sediment
SM	Suspended Matter
SW	Sea Water

List 2

EFFLUENT SOURCES	
Source Code	Description
AG	Agricultural
IN	Industrial
MI	Mixed (Urban/Industrial/Agricultural)
UR	Urban

List 3

STATION TYPES	
Type Code	Description
A	Atmospheric Background
B	Bathing (Recreational)
C	Coastal General
E	Estuarine
H	Hot Spot (Affected by pollution)

STATION TYPES	
Type Code	Description
M	Market (Samples taken from local market)
R	Reference/Offshore
S	Sources of Pollution (Effluent)
X	Unclassified Station Type
Z	Atmospheric Hot Spot

List 4

BIOTA GROUPS	
Group Code	Description
AN*	Annelids
BE*	Benthic organisms
BI*	Bivalves
CE*	Cephalopods
CR*	Crustaceans
EL*	Elasmobranchs
GA*	Gastropods
JF*	Jelly-fish
MO*	Molluscs
TE*	Teleosteans

List 5

INDIVIDUAL SPECIES	
Species Code	Description
AA	Aristeus antennatus
AH	Atherina hepsetus
AR	Argyrosomus regius (Syn. Sciaena aquila, Argyrosomus regium)
AT	Acanthocardia tuberculata (Syn. Rudicardium and Cardium tuberculatum)
AU	Aurelia aurita

INDIVIDUAL SPECIES	
Species Code	Description
BB	Boops boops
BD	Beryx decadactylus
BL	Belone belone
CC	Conger conger
CCG	*Crassostrea gigas*
CG	Chamelea gallina (Syn. Venus gallina)
CH	Chrysaora hysoscella
CM	Carcinus Mediterraneus
CRC	*Crangon crangon*
CS	Callinectes sapidus
CT	Cotylorhiza tuberculata
DA	Diplodus annularis
DC	*Diplodus cervinus* (Syn. *Diplodus trifasciatus*)
DD	Dentex dentex
DG	Dentex gibbosus
DL	Dicentrarchus labrax
DM	Dentex *macrophthalmus*
DP	Diogenes pugilator
DS	Diplodus sargus
DT	Donax trunculus
DV	Diplodus vulgaris
EA	Euthynnus aletteratus
EAE	Epinephelus aeneus
EC	Eledone cirrosa
EE	Engraulis encrasicolus
EG	Epinephelus guaza
LD	Liocarcinus depurator (Syn. Macropipus depurator)
LL	Lithophaga lithophaga
LM	Lithognathus mormyrus (Syn. Pagellus mormyrus)
LP	Lophius piscatorius
LV	Loligo vulgaris
MAU	Mugil auratus
MB	Mullus barbatus
MC	Mactra corrallina (Syn. Mactra stultorum)
MCA	Mugil capito
MCH	Mugil chelo
ME	Mytilus edulis

INDIVIDUAL SPECIES	
Species Code	Description
MG	Mytilus galloprovincialis
MK	Mugil cephalus
MLM	Merlangius merlangus
MM	Merluccius merluccius
MMA	Maena maena
MS	Mullus surmuletus
MSA	Mugil saliens
MSM	Maena smaris
MT	Monodonta turbinata
NE	Neverita josephinia (Syn. Natica josephinia)
NG	Nassarius gibbosulus (Syn. Arcularia gibbosula)
NM	Nassarius mutabilis (Syn. Sphaeronassa mutabilis)
NN	Nephrops norvegicus
NP	Nausithos punctata
OE	Ostrea edulis
OF	Owenia fusiformis
OM	Oblada melanura
OV	Octopus vulgaris
PB	Pandalus borealis
PC	Patella coerula
PE	Palaemon elegans
PGA	Pagellus acarne
PGE	Pagellus erythrinus
PK	Penaeus kerathurus
PL	Parapenaeus longirostris
PLS	Pegusa lascaris
PN	Pelagia noctiluca
PP	Perna perna
PPL	Portunus pelagicus
PS	Pomatomus saltator
RA	Raja asterias
RP	Rhizostoma pulmo
SA	Sardinella aurita
SAR	Sarda sarda
SAU	Sparus auratus
SC	Serranus cabrilla
SI	Scapharca inaequivalvis

INDIVIDUAL SPECIES	
Species Code	Description
SJ	Scomber japonicus
SM	Sardinella maderensis
SMT	Squilla mantis
SO	Sepia officinalis
SP	Sardina pilchardus
SPH	Sphyraena sphyraena
SPS	Scorpaena porcus
SR	Siganus Rivulatus
SS	Sarpa salpa (Syn. Boops salpa)
SSA	Scorpaena scrofa
SSS	Scomber scombrus
SST	Spisula subtrancata
SV	Solea vulgaris
SYS	Saurida undosquamis
TA	Thunnus alalunga
TL	Trigla lucerna
TMC	Trisopterus minutus capelanus
TRM	Trachurus mediterraneus
TRT	Trachurus trachurus
TT	Thunnus thynnus
UM	Upeneus moluccensis
XG	Xiphias gladius
XH	Xantho hydrophilus
XXX	Unknown species

List 6

TISSUE TYPES		
Type Code	English Description	French Description
AB	Abdomen (Crustaceans)	Abdomen (Crustacés)
AR	Arms (Cephalopods)	Bras (Céphalopodes)
BO	Bone	Os
BM	Brown muscle	Muscle brun
CA	Carapace	Carapace

TISSUE TYPES		
Type Code	English Description	French Description
DG	Digestive gland	Glande digéstive
FI	Fillet (Fish)	Filet (Poisson)
FT	Foot (Gastropods)	Pied
GI	Gills	Branchies
GO	Gonads (sex indeterminate)	Gonades
KD	Kidney	Rein
LI	Liver	Foie
OV	Ovary	Ovaire
PI	Pincer (Crustaceans)	Pince (Crustacés)
SC	Scale(s)	Ecaille(s)
SH	Shell	Coquille
SO	Soft Part (Whole body without carapace or shell)	Partie Molle (Corps entier san carapace ou coquille)
SP	Spleen	Rate
ST	Stomach (empty)	Estomac (vide)
WH	Whole body	Corps entier
WM	White muscle	Muscle blanc

List 7

PARAMETER GROUPS	
Group Code	Description
BAC+	Bacterial Indicators
BGM+	Basic Geochemical Measurements
ECO+	Ecological Parameters
HC+	Hydrocarbons
HH+	Halogenated Hydrocarbons
HM+	Heavy Metals
JF+	Jelly-fish Observations
MC+	Micro-organisms
MET+	Meteorological Parameters
NUT+	Nutrients
OIL+	Oil Slick Observations
OTH+	Others

PARAMETER GROUPS	
Group Code	Description
PAH+	Polyaromatic Hydrocarbons
PAT+	Pathogens
PEST+	Pesticides
PHC+	Petroleum Hydrocarbons
PL+	Plankton Observations
PSM+	Persistent Synthetic Material
RAD+	Selected Radionuclides
SP+	Standard Parameters
SPP+	Supplementary Precipitation Parameters

List 8

PARAMETERS										
Param. Code	Description	UNITS OF MEASUREMENT IN MATRICES								
		AI	BI	EF	PL	PR	SA	SD	SM	SW
ACID	Acidity	x	x		x	µeq/L	x	x	x	x
AG	Silver	ng/m3	µg/kg	x	µg/kg	x		µg/kg	µg/kg	µg/L
AIRV	Air Volume	m3	x	x	x	x	x	x	x	x
AL	Aluminium	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
ALD	Aldrin	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	ng/L
ALI	Aliphatics	x	µg/kg	x		x		µg/kg		
ALKA	Alkalinity	ueq/m3	x	x	x	µeq/L	x	x	x	x
ARO	Aromatics	x	µg/kg	x		x		µg/kg		
AS	Arsenic	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
BE	Beryllium	x	µg/kg	µg/L	µg/kg	x		µg/kg		µg/L
BOD5	Biochemical Oxygen Demand	x		mg/L		x				µg/L
CA	Calcium	x	µg/kg	x		µg/L		µg/kg		
CACO3	Calcium Carbonate	x		x		µg/L				
CAF2	Calcium Fluoride	x		x		x				
CD	Cadmium	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
CHLOR	Chlorophyll	x		x		x				
CL	Chlorides/Chlorine	x	µg/kg	x		µg/L				
CLOX	Chlorophenoxy Acids	x		x		x				
CN	Cyanides	x		µg/L		x				
CO	Cobalt	x	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
CO1	Carbon Monoxide	ppm		x		x				

PARAMETERS										
Param. Code	Description	UNITS OF MEASUREMENT IN MATRICES								
		AI	BI	EF	PL	PR	SA	SD	SM	SW
CO2	Carbon Dioxide	ppm		x		x				
COD	Chemical Oxygen Demand	x		mg/L		x				
CONDU	Conductivity	x	x	x	x	uS/cm	x	x	x	uS/cm
CR	Chromium	ng/m3	µg/kg	µg/L		µg/L		µg/kg		µg/L
CS	Caesium	x	µg/kg	x	µg/kg	x		µg/kg	µg/kg	µg/L
CU	Copper	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
DDDO	Dichloro-Diphenyl Dichloroethane op (same as TDEO)	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DDDP	Dichloro-Diphenyl Dichloroethane pp (same as TDEP)	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DDEO	Dichloro-Diphenyl Dichloroethene op	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DDEP	Dichloro-Diphenyl Dichloroethene pp	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DDTO	Dichloro-Diphenyl Trichloroethane op	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DDTP	Dichloro-Diphenyl Trichloroethane pp	pg/m3	µg/kg	µg/L	µg/kg	pg/L		µg/kg	µg/kg	ng/L
DET	Detergents	x	x	µg/L	x	x	x	x	x	
DIE	Dieldrin	pg/m3	µg/kg	x	µg/kg	pg/L		µg/kg	µg/kg	ng/L
EC	E. coli	x	no/g	no/100mL		x		no/g		no/100mL
END	Endrin	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	ng/L
EV	Enteroviruses	x	no/g	no/L		x		no/g		no/10L
F	Fluorides/Fluorine	x		µg/L		x				

PARAMETERS										
Param. Code	Description	UNITS OF MEASUREMENT IN MATRICES								
		AI	BI	EF	PL	PR	SA	SD	SM	SW
FC	Faecal Coliforms	x	no/g	no/100mL		x		no/g		no/100mL
FE	Iron	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
FS	Faecal Streptococci	x	no/g	no/100mL		x		no/g		no/100mL
H2S	Hydrogen Sulphide	x		x		x				
H2SO4	Sulphuric Acid	x		µg/L		x				
HCB	Hexachlorobenzene	pg/m3	µg/kg	x	µg/kg	pg/L		µg/kg	µg/kg	ng/L
HCH	Hexachlorohexane (same as BHC) (excluding Lindane)	pg/m3	µg/kg	x	µg/kg	pg/L		µg/kg	µg/kg	ng/L
HCL	Hydrochloric Acid	x		x		x				
HEP	Heptachlor	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	ng/L
HF	Hydrofluoric Acid	x		µg/kg		x				
HGO	Organic Mercury	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	µg/L
HGT	Total Mercury	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
HH	Halogenated Hydrocarbons	x		µg/L		x				
HOX	Heptachlor Epoxide (same as EPOX)	x	µg/kg	x	µg/kg	x		µg/kg	µg/kg	ng/L
K	Potassium	x	µg/kg	µg/L		µg/L		µg/kg		µg/L
LIN	Lindane	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	ng/L
MG	Magnesium	x	µg/kg	µg/L		µg/L		µg/kg		µg/L
MN	Manganese	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg		µg/L
MO	Molybdenum	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	µg/L
N	Total Nitrogen	x		µg/L		x				µg-A/L
NA	Sodium	x	µg/kg	x		µg/L		µg/kg		µg/L
NAOH	Sodium Hydroxide	x		x		x				

PARAMETERS										
Param. Code	Description	UNITS OF MEASUREMENT IN MATRICES								
		AI	BI	EF	PL	PR	SA	SD	SM	SW
NH3-N	Ammonia reported as nitrogen	µg/m3		x		x				
NH4	Ammonium	x		µg/L		x				µg-A/L
NH4-N	Ammonium reported as nitrogen	µg/m3		x		µg/L				
NI	Nickel	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
NO2	Nitrites	x		µg/L		x				µg-A/L
NO3	Nitrates	µg/m3		µg/L		x				µg-A/L
NO3-2	Nitrates+Nitrites	x		µg/L x		x				µg-A/L
NO3-N	Nitrates reported as nitrogen	µg/m3		x		µg/L				
NORG	Organic Nitrogen	x		µg/L x		x				µg-A/L
NOX	Nitrogen Oxides	µg/m3		x		x				
O3	Ozone	µg/m3	x	x	x	x	x	x	x	x
P	Total Phosphorus	x	µg/kg	µg/L		x		µg/kg		µg-A/L
P2O5	Phosphorus Pentoxide	x		x		x				
PA	Pseudomonas Aeruginosa	x	no/g	no/100mL		x		no/g		no/100mL
PB	Lead	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
PCBA	Polychlorinated Biphenyls (as Arochlor 1254)	pg/m3	µg/kg	µg/L		pg/L		µg/kg		ng/L
PCBB	Polychlorinated Biphenyls (as Arochlor 1260)	pg/m3	µg/kg	µg/L		pg/L		µg/kg		ng/L
PHE	Phenols	x		µg/L x		x		µg/kg		µg/L
PHYPL	Phyto-plankton	x	x	x	x	x	x	x	x	cell/L
PO4	Phosphates	x		µg/L		x				µg-A/L
PORG	Organic Phosphorus	x		x		x				µg-A/L

PARAMETERS										
Param. Code	Description	UNITS OF MEASUREMENT IN MATRICES								
		AI	BI	EF	PL	PR	SA	SD	SM	SW
RB	Rubidium	x	µg/kg	x	µg/kg	x		µg/kg	µg/kg	µg/L
S	Total Sulphur	x	µg/kg	x		x				
SA	Staphylococcus Aureus	x	no/g	no/100mL		x		no/g		no/100mL
SB	Antimony	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	µg/L
SD	Sulphides	x		x		x				
SE	Selenium	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L
SIO4	Silicates	x		x		x				µg-A/L
SM	Salmonella	x	no/g	no/L		x		no/g		no/L
SN	Tin	x	µg/kg	µg/L	µg/kg	x		µg/kg	µg/kg	µg/L
SO2	Sulphur Dioxide	µg/m3		x		x				
SO3	Sulphites	x		x		x				
SO4	Sulphates	x		x		x				
SO4-S	Sulphates reported as sulphur	µg/m3		x		µg/L				
SPM	Total suspended particulate matter	µg/m3	x	x	x	x	x	x	x	
TAR	Tar Ball Collections	x	x	x	x	x	g/m2	x	x	mg/m2
TC	Total Coliforms	x	no/g	no/100mL		x		no/g		no/100mL
TDS	Total Dissolved Solids	x		x		x				
TOC	Total Organic Carbon	x		x		x				
TSS	Total Suspended Solids	x	x	mg/L	x	x	x	x	x	mg/L
V	Vanadium	ng/m3	µg/kg	µg/L x	µg/kg	µg/L		µg/kg	µg/kg	µg/L
ZN	Zinc	ng/m3	µg/kg	µg/L	µg/kg	µg/L		µg/kg	µg/kg	µg/L

List 9

INDUSTRIAL ACTIVITY GROUPS	
Group Code	Description
A	Agricultural and Livestock Production
B	Food Manufacturing
C	Beverage Industry
D	Manufacture of Textiles
E	Manufacture of Leather
F	Manufacture of Wood and Wood and Cork Products, except Furniture
G	Manufacture of Pulp, Paper and Paperboard
H	Manufacture of Industrial Chemicals
I	Manufacture of Miscellaneous Products of Petroleum and Coal
J	Manufacture of Rubber Products
K	Non-metallic Mineral Industry
L	Basic Metal Industry
M	Manufacture of Fabricated Metal Products, Machinery and Equipment
N	Electricity, Gas and Steam
O	Miscellaneous Industries

List 10

INSTITUTE CLASSIFICATIONS	
Classif. Code	Description
IMON	Institute participating in MEDPOL monitoring
IRES	Institute participating in other MEDPOL activities
XXXXX	Unclassified institute

List 11

MONITORING FREQUENCIES		
Frequency Code	Number of Samplings	*Description*
X		Irregular - Number to follow
E		On an event basis
Y	1	Yearly (annually)
S	2	Six-monthly (semi-annually)
Q	4	Quarterly (seasonal
B	6	Bi-monthly
M	12	Monthly
F	24	Fortnightly (twice a month)
W	52	Weekly
D	365	Daily
H	8760	Hourly
C	9999	Continuously

List 12

PERSON'S MONITORING RESPONSIBILITY	
Responsibility Code	Description
CO	Coordinator
RI	Responsible Investigator

List 13

METHODS USED FOR ANALYSIS	
Method Code	Description
MFC	Membrane Filtration Culture
MPN	Most Probable Number
OTH	Other method employed
RM-1	UNEP/WHO: Guidelines for monitoring the quality of coastal recreational and shellfish-growing waters

METHODS USED FOR ANALYSIS	
Method Code	Description
RM-10	UNEP/FAO/IAEA: Determination of total selenium in selected marine organisms by hydride generation atomic absorption spectrophotometry
RM-11	UNEP/FAO/IOC/IAEA: Determination of total cadmium, zinc, lead and copper in selected marine organisms by flameless atomic absorption spectrophotometry
RM-12	UNEP/FAO/IAEA: Sampling of selected marine organisms and sample preparation for the analysis of chlorinated hydrocarbons
RM-13	UNEP/FAO/IAEA: Determination of methylmercury in selected marine organisms by gas chromatography
RM-14	UNEP/FAO/IOC/IAEA: Determination of DDTs and PCBs in selected marine organisms by packed column gas chromatography
RM-15	UNEP/IOC/IAEA: Monitoring of tar on marine beaches
RM-16	UNEP/IAEA: Determination of DDTs, PCBs, PCCs and other hydrocarbons in sea water by gas chromatography
RM-17	UNEP/IAEA: Determination of DDTs, PCBs, PCCs and other hydrocarbons in marine sediments by gas-liquid chromatography
RM-18	UNEP/IOC: Determination of total dissolved cadmium in sea water by differential pulse anodic stripping voltammetry
RM-19	UNEP/IOC/IAEA: Determination of total mercury in estuarine waters and suspended sediment by cold vapour atomic absorption spectrophotometry
RM-2	UNEP/WHO: Determination of total coliforms in sea water by the membrane filtration culture method
RM-20	UNEP/IOC/IAEA: Monitoring of petroleum hydrocarbons in sediments
RM-21	UNEP/WHO/IAEA: Determination of total coliforms in sea water by multiple test tube (MPN) method
RM-22	UNEP/WHO/IAEA: Determination of faecal coliforms in sea water by multiple test tube (MPN) method
RM-23	UNEP/WHO/IAEA: Determination of faecal streptococci in sea water by multiple test tube (MPN) method
RM-24	UNEP/WMO/IAEA: Sampling of aerosols and wet precipitation for analysis of chemical pollutants
RM-26	UNEP/IAEA: Determination of total mercury in marine sediments and suspended solids by cold vapour atomic absorption spectrophotometry
RM-27	UNEP/IAEA: Determination of total cadmium in marine sediments by flameless atomic absorption spectrophotometry
RM-28	UNEP/WHO/IAEA: Determination of staphylococcus aureus in sea water and sewage by the membrane filtration culture method
RM-29	UNEP/WHO/IAEA: Determination of pseudomonas aeruginosa in sea-water and sewage by the membrane filtration culture method
RM-3	UNEP/WHO: Determination of faecal coliforms in sea water by the membrane filtration culture method
RM-30	UNEP/WHO/IAEA: Isolation/enumeration of salmonella from sea water and sewage
RM-31	UNEP/IAEA: Determination of total chromium in marine sediments by flameless atomic absorption spectrophotometry

METHODS USED FOR ANALYSIS	
Method Code	Description
RM-32	UNEP/IAEA: Determination of total cobalt in marine sediments by flameless atomic absorption spectrophotometry
RM-33	UNEP/IAEA: Determination of total copper in marine sediments by flameless atomic absorption spectrophotometry
RM-34	UNEP/IAEA: Determination of total lead in marine sediments by flameless atomic absorption spectrophotometry
RM-35	UNEP/IAEA: Determination of total nickel in marine sediments by flameless atomic absorption spectrophotometry
RM-36	UNEP/IAEA: Determination of total vanadium in marine sediments by flameless atomic absorption spectrophotometry
RM-37	UNEP/IAEA: Determination of total iron in marine sediments by flame atomic absorption spectrophotometry
RM-38	UNEP/IAEA: Determination of total manganese in marine sediments by flame atomic absorption spectrophotometry
RM-39	UNEP/IAEA: Determination of total zinc in marine sediments by flame atomic absorption spectrophotometry
RM-4	UNEP/WHO: Determination of faecal streptococci in sea water by the membrane filtration culture method
RM-40	UNEP/FAO/IOC/IAEA: Determination of DDTs and PCBs in selected marine organisms by capillary column gas chromatography
RM-42	UNEP/IAEA/WMO: Determination of selected trace metals in aerosols and in wet precipitation
RM-5	UNEP/WHO: Determination of faecal coliforms in bivalves by multiple test tube method
RM-7	UNEP/FAO/IOC/IAEA: Sampling of selected marine organisms and sample preparation for trace metal analysis
RM-8	UNEP/FAO/IOC/IAEA: Determination of total mercury in selected marine organisms by cold vapour atomic absorption spectrophotometry
RM-9	UNEP/FAO/IAEA: Determination of total arsenic in selected marine organisms by hydride generation atomic absorption spectrophotometry

ANNEX VII

STATUS OF COMPUTERIZED AGREEMENTS

MED POL Phase II

MONITORING AGREEMENTS
(as of 2-DEC-1991)

COUNTRY	YEAR	MONITORING STATIONS	MONITORING SAMPLING DATA
ALB	91	37	381
ALG	86	67	745
	87	67	735
	88	67	744
	89	45	263
CYP	83	22	150
	84	228	422
	85	202	372
	86	210	531
	87	209	550
	88	214	589
	89	204	504
	90	176	374
	91	172	426
EGY	86	28	171
	89	40	130
	90	40	138
	91	43	150
FRA	87	17	
GRE	88	65	940
	89	55	485
ISR	83	106	208
	84	106	206
	85	81	181
	86	81	181
	87	81	181
	88	98	321
	89	100	273
	90	99	285
LEB	83	10	60
	85	10	87
	86	8	63
	87	8	63
	88	8	63
	89	8	63
	91	8	63
LIY	86	25	276

COUNTRY	YEAR	MONITORING STATIONS	MONITORING SAMPLING DATA
MAT	84	11	238
	85	11	238
	86	16	208
	87	16	236
	88	16	240
	89	16	264
	90	15	267
	91	20	184
MOR	84	55	529
	86	61	401
	87	61	401
	88	61	465
SPA	87	92	691
SYR	86	15	175
	87	15	174
	88	15	184
	89	57	124
	90	57	124
	91	57	77
TUN	89	24	133
	90	38	470
	91	27	199
YUG	83	100	412
	84	190	1111
	85	167	1129
	86	170	1252
	87	170	1260
	88	196	1414
	89	204	1574
	90	196	1486

TOTAL MONITORING STATIONS
5194

TOTAL MONITORING SAMPLING DATA
27034

MED POL Phase II

MONITORING STATIONS
(as of 2-DEC-1991)

COUNTRY	YEAR	STATIONS PROMISED AND REPORTED	STATIONS PROMISED BUT NOT REPORTED	STATIONS NOT PROMISED BUT REPORTED
ALB	91		37	
ALG	86	10	57	28
	87	16	51	4
	88	13	54	3
	89	25	20	
CYP	83		22	5
	84	8	220	
	85	151	51	2
	86	145	65	3
	87	145	64	3
	88	136	78	5
	89	137	67	
	90		176	
	91		172	
EGY	86		28	
	89		40	
	90	14	26	
	91		43	
FRA	87		17	
GRE	86			1
	87			17
	88	14	51	3
	89	15	40	2
ISR	83	79	27	2
	84	70	36	1
	85	59	22	4
	86	51	30	16
	87	12	69	2
	88	24	74	2
	89	12	88	4
	90	19	80	54
ITA	87			30
	88			36
	89			36
LEB	83		10	
	84			11

COUNTRY	YEAR	STATIONS PROMISED AND REPORTED	STATIONS PROMISED BUT NOT REPORTED	STATIONS NOT PROMISED BUT REPORTED
LEB	85	8	2	2
	86	8		5
	87	8		5
	88	2	6	
	89		8	
	91		8	
LIY	86		25	
	89			2
MAT	83			7
	84	7	4	4
	85	7	4	15
	86	12	4	5
	87	11	5	5
	88	11	5	6
	89	11	5	5
	90	11	4	6
	91		20	
MOR	83			6
	84		55	14
	85			6
	86		61	4
	87		61	14
	88	2	59	10
SPA	87		92	
SYR	86	6	9	
	87		15	
	88		15	
	89		57	
	90		57	
	91		57	
TUN	89		24	
	90	6	32	
	91		27	
TUR	84			1
	85			1
YUG	83	55	45	12
	84	105	85	10
	85	123	44	40
	86	123	47	16
	87	118	52	27
	88	135	61	26
	89	53	151	23
	90	22	174	1

TOTAL STATIONS PROMISED/REPORTED
1999

TOTAL STATIONS PROMISED/NOT REPORTED
3195

TOTAL STATIONS NOT PROMISED/BUT REPORTED
552

ANNEX VIII

STATUS OF COMPUTERIZED DATA ON MICRO-ORGANISMS, HEAVY METALS AND HALOGENATED HYDROCARBONS

MED POL Phase II

MICRO-ORGANISMS IN SEA WATER
(as of 2-DEC-1991)

COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
ALB	91	9			
ALG	86	49	19	31	90
ALG	87	49	20	30	53
ALG	88	49	16	37	78
ALG	89	37	24	50	108
CYP	84	145			
CYP	85	145	145	1127	1127
CYP	86	144	145	1787	1787
CYP	87	145	145	1827	1827
CYP	88	145	136	1998	1998
CYP	89	145	135	2139	2139
CYP	90	137			
CYP	91	136			
EGY	86	14			
EGY	89	15			
EGY	90	15	14	36	36
EGY	91	15			
GRE	88	29			
GRE	89	22			
ISR	83	67	66	799	1039
ISR	84	67	55	913	1206
ISR	85	67	49	562	562
ISR	86	67	55	816	816
ISR	87	67			
ISR	88	67			
ISR	89	67			
ISR	90	68	41	602	753
ISR	91		1	2	4
ITA	87		30	121	360
ITA	88		36	144	432
ITA	89		36	144	432
LEB	28		1	1	1
LEB	83	9			
LEB	84		8	72	72
LEB	85	10	8	62	62
LEB	86	7	8	55	55
LEB	87	7	8	71	71
LEB	88	7			

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COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
LEB	89	7			
LEB	91	7			
LIY	86	8			
MAT	81		1	1	1
MAT	83		7	15	45
MAT	84	7	7	46	138
MAT	85	7	7	65	193
MAT	86	12	13	87	254
MAT	87	12	12	81	236
MAT	88	12	11	88	264
MAT	89	12	11	71	213
MAT	90	12			
MAT	91	14			
MOR	83		2	13	39
MOR	84	38	2	18	53
MOR	85		2	22	66
MOR	86	17			
MOR	87	17			
MOR	88	17	8	34	98
SYR	86	6			
SYR	87	6			
SYR	88	6			
SYR	89	52			
SYR	90	52			
SYR	91	52			
TUN	90	13			
TUN	91	13			
YUG	68		1	1	1
YUG	83	54	49	512	512
YUG	84	90	93	892	892
YUG	85	105	116	1069	1069
YUG	86	110	110	1058	1104
YUG	87	110	115	1063	1137
YUG	88	127	134	1282	1450
YUG	89	115	26	277	274
YUG	90	124	2	2	2

TOTAL STATIONS PROMISED

3256

TOTAL STATIONS REPORTED

1930

TOTAL SAMPLES REPORTED

20123

TOTAL DATA REPORTED

23149

MED POL Phase II

HEAVY METALS IN BIOTA
(as of 2-DEC-1991)

COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
ALB	91	12			
ALG	79		2	6	23
ALG	80		3	9	52
ALG	85		6	24	107
ALG	86	17	3	20	100
ALG	87	15			
ALG	88	17			
CYP	83	5	5	5	10
CYP	84	2			
CYP	86		3	5	10
CYP	87		3	5	10
EGY	86	2			
EGY	89	7			
EGY	90	7			
EGY	91	7			
GRE	86		1	3	15
GRE	87		3	22	64
GRE	88	28	3	25	74
GRE	89	14	3	10	30
ISR	82		11	53	58
ISR	83	14	12	56	86
ISR	84	14	14	169	259
ISR	85	14	14	253	888
ISR	86	14	11	255	1185
ISR	87	14	14	261	1448
ISR	88	56	14	206	1236
ISR	89	31	17	138	825
ISR	90	28	12	112	776
ITA	87		4	16	32
ITA	88		4	15	30
ITA	89		4	16	33
LEB	83	1			
LEB	84		1	24	48
LEB	85	1	2	42	84
LEB	86	1	1	12	24
LEB	87	1	2	24	48
LEB	88	1	2	84	168
LEB	89	1			

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COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
LEB	91	1			
LIY	86	5			
MAT	84	7	7	22	110
MAT	85	7	7	13	65
MAT	86	4	2	16	67
MAT	87	4	4	10	50
MAT	88	4	5	12	44
MAT	89	4	4	10	50
MAT	90	4	4	8	40
MOR	83		3	9	18
MOR	84	6	13	15	18
MOR	85		4	10	10
MOR	86	14	1	1	3
MOR	87	14	3	15	45
MOR	88	15	4	16	32
SPA	87	21			
SYR	86	4			
SYR	87	4			
SYR	88	4			
SYR	89	5			
SYR	90	5			
SYR	91	5			
TUN	89	2			
TUN	90	20	6	7	21
TUN	91	4			
TUR	84		1	16	16
TUR	85		1	3	3
YUG	83	17	20	25	71
YUG	84	48	26	88	325
YUG	85	42	28	66	215
YUG	86	45	28	73	192
YUG	87	45	28	66	146
YUG	88	45	27	76	212
YUG	89	42	24	53	123
YUG	90	33	17	67	142

TOTAL STATIONS PROMISED

804

TOTAL STATIONS REPORTED

441

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TOTAL SAMPLES REPORTED
2567

TOTAL DATA REPORTED
9741

MED POL Phase II

HALOGENATED HYDROCARBONS IN BIOTA
(as of 2-DEC-1991)

COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
ALB	91	12			
ALG	85		1	1	4
ALG	86		3	3	19
CYP	83	5	5	5	38
CYP	84	2	1	1	9
CYP	85		1	1	9
CYP	86		3	5	38
CYP	87		3	5	50
CYP	88		5	5	53
CYP	89		5	5	65
EGY	86	2			
EGY	89	7			
EGY	90	7			
EGY	91	7			
GRE	86		1	1	10
ITA	87		4	16	62
ITA	88		4	16	31
LEB	83	1			
LEB	84		1	5	20
LEB	85	1			
LEB	86	1	2	12	39
LEB	87	1	2	48	14
LEB	88	1	2	10	40
LEB	89	1			
LEB	91	1			
MAT	83		1	1	2
MAT	84	7	3	17	34
MAT	85	7	4	10	20
MAT	86	4	2	9	36
MAT	87	4	4	10	40
MAT	88	4	5	8	32
MAT	89	4	4	9	36
MAT	90	4	3	4	16
MOR	84	6			
MOR	86	4			
MOR	87	4	7	7	63
MOR	88	9			

COUNTRY	YEAR	STATIONS PROMISED	STATIONS REPORTED	SAMPLES REPORTED	DATA REPORTED
SPA	87	21			
SYR	89	3			
SYR	90	3			
SYR	91	3			
TUN	90	18			
TUR	84		1	5	5
TUR	85		1	5	5
YUG	82		1	2	14
YUG	83	15	7	11	84
YUG	84	32	12	39	175
YUG	85	17	13	35	161
YUG	86	19	8	26	111
YUG	87	19	13	34	132
YUG	88	22	15	49	218
YUG	89	16	18	41	178
YUG	90	21	17	55	254

TOTAL STATIONS PROMISED
315

TOTAL STATIONS REPORTED
182

TOTAL SAMPLES REPORTED
516

TOTAL DATA REPORTED
2117

ANNEX IX

STATUS OF PREPARATION OF DATA REPORTING FORMS

(as approved at IAAC XXV, December 1991)

Category	Matrix	Responsible	Ready by:
Heavy metals	Effluents	WHO	February 1992
Chlorinated hydrocarbons	Effluents	WHO	February 1992
Nutrients	Effluents	WHO	February 1992
Heavy metals	Sediments	IAEA	Existing
Chlorinated hydrocarbons	Sediments	IAEA	Existing
Heavy metals	Sea-water	IOC/ICES	Existing
Microbial contaminants	Sea-water	WHO	Existing
Petroleum hydrocarbons	Sediments	IOC/IAEA	Existing
Petroleum hydrocarbons	Sea-water	IOC	Existing
Pelagic tar	Sea-water	IOC	Existing
Oil slicks	Sea-water	IOC	Existing
Tar on beaches	-	IOC	Existing
Petroleum hydrocarbons	Organisms	IOC/IAEA	March 1992
Standard physical and chemical parameters	-	IOC/IAEA	June 1992
Airborne pollution	-	WMO	Existing
Litter	Beach	IOC/FAO	Existing

ANNEX X

RESEARCH PROJECTS:

1) ON-GOING
2) 1991 UNDECIDED
3) 1992 PROJECTS

(AS OF DECEMBER 1991)

1) LIST OF ON-GOING PROJECTS
(as of December 1991)

FAO

FAO CYP-3 -i DEMETROPOULOS, A. 1989: 3000
RESEARCH ON POLLUTION INPUT, DISPERSION OF POLLUTANTS, AND THEIR 1990: 4000
EFFECTS ON THE MARINE LIFE IN THE VASSILIKO AREA. 1991: Nil

Department of Fisheries - Ministry of Agriculture and Natural Resources, Nicosia, Cyprus Total (USD): 7000

FAO EGY-20 -g TAYEL, F. T. 1989: 3000
EFFECT OF POLLUTION BY HYDROGEN SULFIDES ON THE HYDROBIONS IN BOTH ABU 1990: 4000
QIR BAY AND WESTERN HARBOUR 1991: 3000

National Institute of Oceanograpy and Fisheries (Alexandria Branch) - National Institute of Oceanography and Fisheries, Alexandria, Egypt Total (USD): 10000

FAO FRA-48 -g ROMEO, M. 1989: 3000
ETUDE DES EFFETS TOXIQUES ET PROTECTEURS DU SELENIUM CHEZ DES ALGUES 1990: Nil
MARINES 1991: 4000

Institut national de la sante et de la recherche medicale (INSERM), Unite 303 - Institut national de la sante et de la recherche medicale (INSERM), Villefranche-sur-Mer, France Total (USD): 7000

FAO GRE-55 -g HARITOS, A. A. 1988: 3500
STUDY OF QUALITATIVE AND QUANTITATIVE EFFECTS OF SELENIUM, ARSENIC AND 1989: Nil
CHROMIUM ON PEPTIDES AND PROTEINS OF CRUSTACEANS BY HIGH PERFORMANCE 1990: 3500
LIQUID CHROMATO- GRAPHY AND ELECTROPHORETIC TECHNIQUES 1991: Nil

Department of Biology, Zoological Laboratory and Museum - University of Athens, Athens, Greece Total (USD): 7000

FAO GRE-65 -i PAGOU, K. 1989: 3000
POLLUTION EFFECTS ON PLANKTON COMPOSITION AND SPATIAL DISTRIBUTION 1990: Nil
NEAR THE SEWAGE OUTFALL OF ATHENS (SARONIKOS GULF) 1991: 3500

National Centre for Marine Research - , Athens, Greece Total (USD): 6500

FAO GRE-68 -h KARYDIS, M. 1989: 3000
EUTHROPHICATION ASSESSMENT BASED ON MULTIVARIATE PROCEDURES: CRITERIA 1990: 3600
DEVELOPMENT FOR THE MANAGEMENT OF COASTAL WATERS 1991: 3500

Department of Environmental Studies - University of the Aegean, Mytilini, Greece Total (USD): 10100

FAO GRE-72 -i ZENETOS, A. 1990: 3500
EFFECTS OF SEWERAGE ON THE DISTRIBUTION OF BENTHIC FAUNA IN SARONIKOS 1991: 3500
GULF.

National Centre for Marine Research - , Athens, Greece Total (USD): 7000

FAO GRE-85 -III PAPATHANASSIOU, E. 1990: 3500
PHYSIOLOGICAL RESPONSES OF MARINE INDICATOR ORGANISMS TO GLOBAL 1991: Nil
POLLUTION

National Centre for Marine Research - , Athens, Greece Total (USD): 3500

FAO GRE-86 -III PANCUCCI, MARIA-ANTONETTE 1991: 3500
IMPACT DE L'EUTROPHICATION SUR LES PEUPLEMENTS D'OURSINS DU GOLFE
AMVRAKIKOS (MER IONIENNE, GRECE)

National Centre for Marine Research - , Athens, Greece Total (USD): 3500

FAO GRE-87 -IV SCOULLOS, M. J. 1991: 4000
TRANSFER OF TRACE METALS FROM WATER TO SEDIMENT THROUGH GREEN ALGAE
(ULVA LACTUCA)

Department of Inorganic and Environmental Chemistry - University of Athens, Athens, Greece Total (USD): 4000

FAO GRE-88 -III VERRIOPOULOS, G. 1990: 3000
THE INFLUENCE OF POLLUTION ON THE PHYSIOLOGY OF CERTAIN ZOOPLANTONIC AND BENTHIC ORGANISMS FROM THE SARONICOS GULF 1991: Nil

Department of Biology, Zoological Laboratory and Museum - University of Athens, Athens, Greece Total (USD): 3000

FAO GRE-90 -III PAPOUTSOGLOU, SOFRONIOS E. 1991: 4000
EFFECTS OF WATER POLLUTION ON THE PHYSIOLOGY AND BODY CHEMICAL COMPOSITION OF COMMERCIALLY CULTURED (OR NOT) MARINE AND BRACKISH WATER FISH OF THE MEDITERRANEAN

Department of Applied Hydrobiology - Agricultural University College, Athens, Greece Total (USD): 4000

FAO ISR-34 -g ACHITUV, Y. 1989: 3000
BIOACCUMULATION OF HEAVY METALS IN MARINE ORGANISMS STUDIED BY X-RAY MICROANALYSIS 1990: Nil
1991: 4000

Department of Life Sciences - Bar-Ilan University, Ramat-Gan, Israel Total (USD): 7000

FAO ISR-38 -g NEVO, E. 1990: 4000
BIOCHEMICAL DETOXIFICATION AS AN ADAPTATION TO POLLUTED MARINE ENVIRONMENTS 1991: 4500

Institute of Evolution - University of Haifa, Haifa, Israel Total (USD): 8500

FAO ISR-40 -g FISHELSON L.& YAMETZ, A. 1990: 4000
ECOLOGY, ENZYMOLOGY AND POPULATION DYNAMICS OF SOME SELECTED LITTORAL MARINE MOLLUSCS 1991: 5000

Department of Zoology - University of Tel-Aviv, Tel Aviv-Jaffa (Yafo), Israel Total (USD): 9000

FAO ISR-41 -h LOYA, J. 1990: 4000
SWARMING OF JELLYFISH IN SPECIFIC LOCALITIES ALONG THE MEDITERRANEAN COAST OF ISRAEL: AN ENVIRONMENTAL APPROACH 1991: 4000

Department of Zoology - University of Tel-Aviv, Tel Aviv-Jaffa (Yafo), Israel Total (USD): 8000

FAO ISR-51 -III SPANIER E. & GALIL B.S., 1990: 3500
ECOLOGICAL ASSESSMENT OF THE RECENT MASSIVE BLOOM OF THE SCYPHOMEDUSA 'RHOPILEMA NOMADICA' IN THE SOUTHEASTERN MEDITERRANEAN 1991: Nil
[GALIL C/O ISR HAI 1]

Centre for Maritime Studies - University of Haifa, Haifa, Israel Total (USD): 3500

FAO ITA-94 -i BRESSAN, G. 1987: 3000
MONITORAGE DES PHANERCGAMES MARINES DU GOLFE DE TRIESTE: ANALYSE DES VARIATIONS DE L'ECOSYSTEME 1988: Nil
1989: Nil
1990: 3000
1991: Nil

Centro Internazionale Mediterraneo Ambiente Meduse (CIMAM) - , Trieste, Italy Total (USD): 6000

FAO ITA-111 -h CARLI, A. 1988: 3500
STUDY OF PLANKTONIC POPULATIONS IN RELATION TO THE EUTROPHICATION STATE OF WATER IN A LIGURIAN SEA ZONE 1989: Nil
1990: 2500
1991: Nil

Istituto Policattedra di Scienze Ambientali Marine (ISAM) - Universita degli Studi di Genova, Genoa (Genova), Italy Total (USD): 6000

FAO ITA-117 -i SARA, M. 1989: Nil
EVALUATION OF THE INFLUENCE OF SUSPENDED MATTER DUE TO CIVIL AND INDUSTRIAL DISCHARGES ON BENTHIC ROCKY COMMUNITIES OF A CLIFF NEAR THE *PORTOFINO PROMONTORY (RIVIERA LIGURE DI LEVANTE)* 1990: 4000
1991: Extended

Istituto di Zoologia - Universita degli Studi di Genova, Genoa (Genova), Italy Total (USD): 4000

FAO ITA-128 -IV BALDI, F. 1990: 3000
IMPORTANCE OF MICROORGANISMS ON CHROMIUM ACCUMULATION AND TRANSFORMATION 1991: Nil

Diapartimento di Biologia Ambientale - Universita degli Studi di Siena, Siena, Italy Total (USD): 3000

FAO LEB-5 -h ABBOUD-ABI SAAB, M.
INFLUENCE DES RIVIERES SAISONNIERES SUR LA DYNAMIQUE DES POPULATIONS PLANCTONIQUES (PRODUCTION IAIRE.) - CAS TYPIQUE DE LA COTE CENTRALE DU LIBAN
1989: 2000
1990: 5000
1991: Nil

Centre for Marine Research - , Beirut, Lebanon
Total (USD): 7000

FAO SPA-34 -g MEDINA ESCRICHE, J. M.
STUDY OF SEVERAL HEAVY METALS ACCUMULATION AND THEIR RELATION TO INDUCED METAL- BINDING PROTEINS IN MEDITERRANEAN MARINE INVERTEBRATES
1989: Nil
1990: 3000
1991: Extended

University College of Castellon - University of Valencia, Valencia, Spain
Total (USD): 3000

FAO SPA-36 -I VELASQUEZ, Z.
EXPERT SYSTEM FOR PHYTOPLANKTON CLASSIFICATION
1991: 4500

Centre de estudios avanzados de Blanes - Consejo Superior de Investigaciones Cientificas, Gerona, Spain
Total (USD): 4500

FAO SYR-2 -IV BAKER, M.
CONTRIBUTION A L'ETUDE DES FLUX DE MATIERES DANS LES EAUX COTIERES SYRIENNES (EN FACE DE LATTAKIE). ROLE DU PLANCTON DANS LE TRANSPORT DE QUELQUES METAUX LOURDS.
1991: 4000

Marine Research Centre (MRC) - Tishreen University, Lattakia, Syrian Arab Republic
Total (USD): 4000

FAO SYR-3 -IV ABOSAMRA, F.
SPECIATION AND BIOACCUMULATION OF CHROMIUM IN THE TISSUES OF MARINE ANIMALS FROM SYRIAN COASTAL WATERS
1991: 4500

High Institute of Applied Sciences and Technology - , Damascus, Syrian Arab Republic
Total (USD): 4500

FAO TUR-22 -g ARINC, E.
DEVELOPMENT OF AN ENZYMATIC ASSAY SYSTEM FOR DETERMINATION OF BIOACTIVATION OF TOXIC ORGANIC CHEMICALS
1989: Nil
1990: 4000
1991: 4500

Department of Biological Sciences - Middle East Technical University, Ankara, Turkey
Total (USD): 8500

FAO TUR-24 -h KORAY, T.
RESEARCH ON EUTROPHICATION PROCESSES AND TOXIC ALGAL BLOOMS (RED-TIDES) IN IZMIR BAY (AEGEAN SEA).
1990: 3000
1991: 2500

Faculty of Science, Department of Biology - Aegean University, Izmir, Turkey
Total (USD): 5500

FAO YUG-86 -h DEGOBBIS, D.
EUTROPHICATION TRENDS IN THE NORTHERN ADRIATIC SEA
1988: 4000
1989: Nil
1990: 3000
1991: Nil

Centre for Marine Research - Rudjer Boskovic Institute, Rovinj, Yugoslavia
Total (USD): 7000

FAO YUG-93 -h ZAVODNIK, D.
PHYTOPLANKTON BLOOM CONSEQUENCES ON BENTHIC ORGANISMS
1989: 3000
1990: Nil
1991: 4500

Centre for Marine Research - Rudjer Boskovic Institute, Rovinj, Yugoslavia
Total (USD): 7500

FAO YUG-101 -h MARASOVIC, I.
MECHANISMS OF INITIATION AND PERSISTENCE OF RED TIDE IN SOME POLLUTED AREAS.
1990: 4000
1991: 4000

Institute of Oceanography and Fisheries - , Split, Yugoslavia
Total (USD): 8000

FAO YUG-108 -IV BRANICA, M.
UPTAKE, RELEASE AND TRANSPORTATION OF MERCURY SPECIES BY THE MUSSEL "MYTILUS GALLOPROVINCIALIS"
1991: 4000

Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia
Total (USD): 4000

IAEA

IAEA FRA-18 -l MARTIN, J. M.
MECANISMES DE TRANSFERT DE RADIONUCLEIDES ARTIFICIELS ENTRE LE RHONE ET LA MEDITERRANEE. APPORTS DE RADIOELEMENTS ARTIFICIELS PAR LE RHONE A LA MEDITERRANEE
[COMBINED WITH FRA-23/L]
Ecole Normale Superieure - , Paris, France

1985: Nil
1986: Nil
1987: Nil
1988: 3000
1989: 3000
1990: 3000
1991: Extended
Total (USD): 9000

IAEA FRA-49 -k GARRIGUES, P.
LES HYDROCARBURES AROMATIQUES POLYCYCLIQUES DANS L'ENVIRONNEMENT MARIN COTIER : ASPECTS PHYSICO-CHIMIQUES ET BIOCHIMIQUES

Laboratoire de Photophysique et Photochimie Moleculaire - Universite de Bordeaux, Talence, France

1989: 2400
1990: Nil
1991: Extended
Total (USD): 2400

IAEA GRE-20 -l VARNAVAS, S.
DISPERSION AND TRANSPORT PROCESSES OF HEAVY METALS IN A CHROMITE WATER DUMPING SITE IN A SEMI-ENCLOSED EMBAYMENT OF LOW CURRENT AND WAVE ENERGY

Department of Geology - University of Patras, Patras, Greece

1989: 4000
1990: Nil
1991: Extended
Total (USD): 4000

IAEA GRE-37 -k GRIMANIS, A. P.
TRANSFER OF POLLUTANTS (HEAVY METALS-HYDROCARBONS) IN THE MARINE ENVIRONMENT OF SARONIKOS GULF

Institute of Physical Chemistry - Demokritos National Centre for Scientific Research, Athens, Greece

1986: 2500
1987: Nil
1988: 2500
1989: 2500
1990: Nil
1991: Extended
Total (USD): 7500

IAEA GRE-71 -a STEPHANOU, E.
POLYNUCLEAR AROMATIC HYDROCARBONS (PAH) AND FUEL OIL DERIVED COMPOUNDS IN AIR, SEDIMENT AND MARINE ORGANISMS OF A MARINE ENVIRONMENT. STUDY OF THEIR INCIDENCE AND FATE

Department of Biology, Laboratory for Marine Biology - University of Crete, Iraklion, Greece

1989: 4500
1990: Nil
1991: Extended
Total (USD): 4500

IAEA GRE-74 -a PARISSAKIS, G.
INVESTIGATION OF ORGANOTIN COMPOUNDS AND THEIR DISTRIBUTION IN THE GREEK MARINE ENVIRONMENT.

Department of Civil Engineering - National Technical University, Athens, Greece

1990: 2000
1991: Extended
Total (USD): 2000

IAEA GRE-82 -k VARNAVAS, S.
A STUDY OF THE BEHAVIOUR AND FATE OF METALS RELEASED IN THE GULF OF CORINTH, GREECE FROM AN ALUMINA PROCESSING PLANT.

Department of Geology - University of Patras, Patras, Greece

1990: 5000
1991: Extended
Total (USD): 5000

IAEA ISR-30 -l KROM, M. D.
DETERMINATION OF THE TOTAL INVENTORY AND SPATIAL DISTRIBUTION OF POLLUTANT TRACE METALS FROM LAND-BASED SOURCES IN THE SEDIMENTS FROM HAIFA BAY, ISRAEL

Israel Oceanographic and Limnological Research Ltd. (IOLR) - , Haifa, Israel

1988: 4000
1989: 4000
1990: 4000
1991: Extended
Total (USD): 12000

IAEA ITA-70 -a MAGNONI, G.
EXPERIMENTAL PROGRESSES IN HEAVY METALS PIXE ANALYSIS IN SEAWATERS
[UNTIL 89: R. CECCHI]
Osservatorio Geofisico (OG) - Universita degli Studi di Modena, Modena, Italy

1987: 4000
1988: 4000
1989: 4000
1990: 4000
1991: Extended
Total (USD): 16000

IAEA ITA-76 -k TASSI PELATI, L.
BIOLOGICAL TRANSFER OF RADIONUCLIDES IN THE SEA
[SEE ALSO ITA/14-L]
Facolta di Scienze, Istituto di Zoologia - Universita degli Studi di Parma, Parma, Italy

1984: Nil
1985: Nil
1986: Nil
1987: Nil
1988: Nil
1989: Nil
1990: Nil
1991: Extended

IAEA SPA-38 -I MEDINA ESCRICHE, J.
EFFECT OF INORGANIC AND ORGANIC TREATMENTS ON MARINE SEDIMENTS BY ELECTRONIC MICROSCOPY, ATOMIC ABSORPTION SPECTROSCOPY AND GAS CHROMATOGRAPHY WITH NORMALIZATION PURPOSES

Departamento de Quimica Analitica - Universidad Complutense de Madrid, Madrid, Spain

1990: 3000
1991: Extended
Total (USD): 3000

IAEA TUR-21 -a HENDEN, E.
LONG TERM CONTROL OF TIN POLLUTION OF THE SEAWATER IN ALIAGA, ISMIR

Faculty of Science, Department of Biology - Aegean University, Izmir, Turkey

1989: 4000
1990: Nil
1991: Extended
Total (USD): 4000

IAEA YUG-74 -k HORVAT, M.
ESTABLISHEMENT OF MERCURY LEVELS IN THE ADRIATIC SEA

Institute Josef Stefan - Edvard Kardelj University (University of Ljubljana), Ljubljana, Yugoslavia

1987: Nil
1988: Nil
1989: 4500
1990: Nil
1991: Extended
Total (USD): 4500

IAEA YUG-85 -k COSOVIC, B.
OCCURRENCE, FATE AND EFFECTS OF SYNTHETIC SURFACTANTS IN THE MARINE ENVIRONMENT

Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia

1988: 5000
1989: 5000
1990: 5000
1991: Extended
Total (USD): 15000

IAEA YUG-90 -a RASPOR, B.
DEVELOPMENT OF NEW METHOD FOR THE ESTIMATION OF SEAWATER POLLUTION WITH TRACE METALS

Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia

1989: 4000
1990: Nil
1991: Extended
Total (USD): 4000

IOC

IOC ALG-1 -a LARID/CHOUIKI A., M.
MISE AU POINT ET ESSAI DE TECHNIQUES D'ECHANTILLONNAGES ET D'ANALYSE POUR LA SURVEILLANCE DES POLLUANTS DE LA MER

Institut des sciences de la mer et de l'amenagement du littoral (ISMAL) - , Alger, Algeria

1985: Nil
1986: Nil
1987: Nil
1988: Nil
1989: 2700
1990: Nil
1991: 2500
Total (USD): 5200

IOC ALG-7 -a ABDEDDAIM, K.
RECHERCHE ET DEVELOPPEMENT DE TECHNIQUES D'ECHANTILLONNAGE ET D'ANALYSE D'HYDROCARBURES PETROLIERS ET DERIVES DE L'INDUSTRIE PETROCHIMIQUE DISSOUS OU DISPERSES EN MILIEU MARIN

Institut des sciences de la nature (USTHB) - Universite des sciences et de technologie "Houari Boumedienne", Alger, Algeria

1988: 4000
1989: Nil
1990: Nil
1991: Nil
Total (USD): 4000

IOC GRE-50 -f KOUTITAS, C.
PHYSICAL INVESTIGATION AND MODELLING OF CIRCULATION AND POLLUTANTS TRANSPORT IN AEGEAN SEA

Department of Civil Engineering - Aristotelian University of Thessaloniki, Thessaloniki, Greece

1987: 2000
1988: 4000
1989: Nil
1990: Nil
1991: Nil
Total (USD): 6000

IOC GRE-75 -l PANAGOPOULOS, P.
RESEARCH ON THE APPLICABILITY OF REMOTE SENSING FOR SURVEY OF WATER QUALITY PARAMETERS IN THE MEDITERRANEAN.

Hydro-Systems Analysis - , Athens, Greece

1989: Nil
1990: 3000
1991: 3000
Total (USD): 6000

IOC GRE-80 -f KRESTENITIS, Y. N.
DEVELOPMENT OF A QUASI DEPTH-VARYING MATHEMATICAL MODEL FOR SIMULATING WIND-INDUCED COASTAL CIRCULATION.

Department of Civil Engineering - Aristotelian University of Thessaloniki, Thessaloniki, Greece

1989: 5000
1990: 5000
1991: Nil
Total (USD): 10000

IOC GRE-84 -l SOUVERMEZOGLOU, E.
ETUDE DU CYCLE BIOGEOCHIMIQUE DU GAZ CARBONIQUE EN MEDITERRANEE ORIENTALE.

National Centre for Marine Research - , Athens, Greece

1989: 5500
1990: 5000
1991: Nil
Total (USD): 10500

IOC GRE-94 -II LASCARATOS, A.
DEVELOPMENT OF AN OCEANOGRAPHIC TIME-SERIES ANALYSIS SOFTWARE PACKAGE FOR PERSONAL COMPUTERS.

Department of Applied Physics, Laboratory of Meteorology - University of Athens, Athens, Greece

1990: 6000
1991: Nil
Total (USD): 6000

IOC GRE-95 -I GEORGOPOULOS, D.
REMOTE SENSING OVER THE AEGEAN SEA USING AVHRR, CZCS AND SPACE SHUTTLE IMAGERY

National Centre for Marine Research - , Athens, Greece

1991: 6000
Total (USD): 6000

IOC ISR-50 -II RUBIN, H.
NUMERICAL SIMULATION OF CIRCULATION AND POLLUTANTS MIGRATION IN EASTERN MEDITERRANEAN

CAMERI - Coastal and Marine Engineering Research Institute, Technion - , Haifa, Israel

1991: 6000
Total (USD): 6000

IOC YUG-81 -l ZUTIC, V.
POLLUTANT ACCUMULATION AT THE HALOCLINE OF MEDITERRANEAN STRATIFIED ESTUARIES

Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia

1988: 4000
1989: 3000
1990: Nil
1991: Nil
Total (USD): 7000

IOC YUG-97 -f LIMIC, N.	1989:	3000
MODELLING NON-STATIONARY TRANSPORT OF POLLUTANTS IN COASTAL SEAS.	1990:	Nil
	1991:	4000
Department of Physics - University of Zagreb, Zagreb, Yugoslavia	Total (USD):	7000
IOC YUG-98 -f LEGOVIC, T.	1989:	3000
ESTIMATION OF DIFFUSE INPUT OF A POLLUTANT INTO A COASTAL SEA.	1990:	Nil
	1991:	4000
Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia	Total (USD):	7000
IOC YUG-104 -f GACIC, M.	1989:	6000
CLIMATIC CHANGES IN THE EASTERN MEDITERRANEAN AND BLACK SEA	1990:	5000
	1991:	Nil
Institute of Oceanography and Fisheries - , Split, Yugoslavia	Total (USD):	11000

WHO

WHO FRA-46 -k GAUTHIER, M. J.
INFLUENCE DES MECANISMES D'OSMOREGULATION SUR LA SURVIE ET L'ADAPTATION DES BACTERIES ENTERIQUES DANS L'ENVIRONNEMENT MARIN

1989: 3500
1990: 3500
1991: Extended

Institut national de la sante et de la recherche medicale (INSERM) - Institut national de la sante et de la recherche medicale (INSERM), Nice, France

Total (USD): 7000

WHO FRA-47 -k GAUTHIER, M. J.
ETUDE EXPERIMENTALE DU TRANSFERT DE GENES PLASMIDIQUES ENTRE LES ENTEROBACTERIES DANS L'EAU DE MER, LES SEDIMENTS ET LE TRACTUS DIGESTIF DES INVERTEBRES MARINS

1989: 4000
1990: 3000
1991: Extended

Institut national de la sante et de la recherche medicale (INSERM) - Institut national de la sante et de la recherche medicale (INSERM), Nice, France

Total (USD): 7000

WHO GRE-53 -a PAPADAKIS, J. A.
A STUDY ON THE COMPARATIVE DISTRIBUTION OF MICROBIAL AND YEAST POPULATIONS IN SAND AND SEAWATER

1987: 4000
1988: 3500
1989: 3000
1990: Nil
1991: Extended

Athens School of Hygiene - Ministry of Health & Welfare, Athens, Greece

Total (USD): 10500

WHO GRE-57 -k KRIKELIS, V.
TRANSFER OF MICROBIAL AND CHEMICAL POLLUTANTS FROM THE RIVER OF PINEOS TO COASTAL WATERS OF STOMION

1988: 3000
1989: Nil
1990: 3000
1991: Extended

Institut Pasteur - , Athens, Greece

Total (USD): 6000

WHO GRE-58 -d PAPAPETROPOULOU, M.
EFFECTS OF BATHING ON HUMAN SKIN FLORA

1988: 4000
1989: 3000
1990: Nil
1991: Extended

Faculty of Health Science, Laboratory of Public Health - University of Patras, Patras, Greece

Total (USD): 7000

WHO GRE-66 -d PAPADAKIS, J. A.
INVESTIGATION OF THE DERMATOLOGICAL DISEASES AFTER BATHING AND THEIR POSSIBLE RELATION TO THE BACTERIOLOGICAL AND FUNGAL FLORA OF SEA WATER AND SAND AND FREQUENCY OF BATHING.

1989: 6000
1990: Nil
1991: Extended

Athens School of Hygiene - Ministry of Health & Welfare, Athens, Greece

Total (USD): 6000

WHO GRE-69 -k KOSTOPOULOU-KARADANELLI, M.
INFLUENCE SUR LA SURVIVANCE DE LA FLORE MICROBIENNE DANS DES MILIEUX PRESENTANT DE GRANDES CONCENTRATIONS (DE CONCENTRATIONS ELEVEES) EN PHOSPHORE ET AZOTE ORGANIQUE

1989: Nil
1990: 3000
1991: Extended

Laboratoire prefectoral de Lesvos (Mytilini) - Departement de l'environnement, Mytilini, Greece

Total (USD): 3000

WHO GRE-73 -I PAPADAKIS, J.A.
ENTEROCOCCI (NUMBER AND SPECIES) AS FEACAL INDICATORS N SEA WATER AND MUSSELS.

1990: 4000
1991: Extended

Athens School of Hygiene - Ministry of Health & Welfare, Athens, Greece

Total (USD): 4000

WHO GRE-79 -a STATHOPOULOS, G. A.
DETECTION OF ENTERIC PATHOGENS IN SHELLFISH AND THEIR RELATION TO THE PRESENCE OF INDICATOR MICROORGANISMS.

1990: 4000
1991: Extended

School of Medicine, Laboratory of Hygiene - Aristotelian University of Thessaloniki, Thessaloniki, Greece

Total (USD): 4000

WHO GRE-83 -k PAPAPETROPOULOU, M.
STRUCTURAL AND PHYSIOLOGICAL CHANGES IN E-COLI CELLS STARVED IN SEAWATER.

1990: 3000
1991: Extended

Faculty of Health Science, Laboratory of Public Health - University of Patras, Patras, Greece

Total (USD): 3000

WHO ISR-19 -g RAV-ACHA, H.
MUTAGENICITY OF CHLORINATED SEAWATER FROM POWER PLANTS COOLING SYSTEMS
Faculty of Mathematics & Nat. Sciences, School of Applied Sciences & Technology - Hebrew University of Jerusalem, Jerusalem, Israel
1986: 3000
1987: 3000
1988: Nil
1989: Nil
1990: 3000
1991: Extended
Total (USD): 9000

WHO ISR-33 -a GHINSBERG, R.
STUDY OF THE PREVALENCE OF PATHOGENIC BACTERIA IN THE SAND OF POPULATED BEACHES IN THE TEL AVIV AREA (MEDITERRANEAN SEA)
Dr. A. Felix Public Health Laboratory - Ministry of Health, Tel Aviv-Jaffa (Yafo), Israel
1989: 3000
1990: 4000
1991: 3000
Total (USD): 10000

WHO ISR-36 -a MATES, A.
QUANTITATIVE DETERMINATION OF CANDIDA ALBICANS IN SEA WATER
Dr. A. Felix Public Health Laboratory - Ministry of Health, Tel Aviv-Jaffa (Yafo), Israel
1990: 3000
1991: Extended
Total (USD): 3000

WHO ISR-49 -I PLATZNER, N.
DETECTION OF PATHOGENIC FUNGI AT ISRAELI BEACHES ON THE MEDITERRANEAN SEA
District Public Health Laboratory - Ministry of Health, Beersheba, Israel
1990: 3000
1991: Extended
Total (USD): 3000

WHO ISR-52 -I SHEINMAN & BERDICEVSKY, R. & I.
CORRELATION BETWEEN BACTERIAL INDICATORS AND POTENTIAL PATHOGENIC FUNGI, IN SEA WATER (ACTIVITY A & C)
[BERDICEVSKY C/O TECHNION FACULTY MED.HAI]
District Public Health Laboratory - Ministry of Health, Haifa, Israel
1990: 3000
1991: Extended
Total (USD): 3000

WHO ITA-88 -e ZAPPONI, G. A.
THE HEALTH COMPONENT OF ENVIRONMENTAL IMPACT ASSESSMENT - EIA OF SELECTED PROJECTS AND DEVELOPMENTS IN THE MEDITERRANEAN COASTAL AREAS
Istituto Superiore di Sanita - Ministero della Sanita, Rome (Roma), Italy
1987: 5000
1988: Nil
1989: Nil
1990: Nil
1991: Extended
Total (USD): 5000

WHO ITA-107 -d MARIN, V.
STUDIES ON THE WATER QUALITY OF THE NORTH ADRIATIC SEA AND ITS EFFECT ON PUBLIC HEALTH
Istituto di Igiene - Universita degli Studi di Padova, Padua (Padova), Italy
1988: 4000
1989: 3000
1990: Nil
1991: Extended
Total (USD): 7000

WHO ITA-113 -g PAGANO, G.
IDENTIFICATION AND BIOLOGICAL MONITORING OF SUB-LETHAL RISK FACTORS IN WATER AND SEDIMENTS OF TWO RIVERS IN CAMPANIA REGION, ITALY
Istituto Nazionale Tumori - , Naples (Napoli), Italy
1988: 3500
1989: 3000
1990: Nil
1991: Extended
Total (USD): 6500

WHO ITA-114 -d PACCAGNELLA, B.
HEALTH EFFECTS OF FOETAL AND NEONATAL EXPOSURE TO METHYLMERCURY VIA BREAST-FEEDING
Dipartimento Pediatrico - Universita degli Studi di Padova, Padua (Padova), Italy
1988: 6000
1989: 4000
1990: Nil
1991: Extended
Total (USD): 10000

WHO ITA-115 -d MORETTI, G.
STUDY ON THE MERCURY, METHYLMERCURY AND SELENIUM LEVELS IN THE NORTH-EAST ITALIAN COASTAL POPULATIONS
Istituto di Igiene - Universita degli Studi di Padova, Padua (Padova), Italy
1988: 6000
1989: 4000
1990: 4000
1991: Extended
Total (USD): 14000

WHO ITA-116 -g BOLOGNESI, C.
INVESTIGATION ON TOPOGRAPHICAL DISTRIBUTION OF FISH TUMORS AS INDICATORS OF ENVIRONMENTAL PATHOLOGY
Istituto Nazionale per la Ricerca sul Cancro - , Genoa (Genova), Italy
1988: 3500
1989: 3000
1990: 3000
1991: Extended
Total (USD): 9500

WHO ITA-122 -d PACCAGNELLA, B.
EPIDEMIOLOGICAL STUDIES ON CADMIUM AND OTHER HEAVY METALS (PB, CR, NI, ZN, SN) IN FISH AND HUMAN HEALTH IN THE MEDITERRANEAN AREA

Dipartimento Pediatrico - Universita degli Studi di Padova, Padua (Padova), Italy

1989: 5000
1990: 4000
1991: Extended
Total (USD): 9000

WHO ITA-123 -d SCARPA, C.
A TOXICOLOGIC STUDY OF JELLYFISH ENVENOMATION

Istituto di Clinica Dermatologica - Universita degli Studi di Trieste, Trieste, Italy

1989: Undecided
1990: 2000
1991: Extended
Total (USD): 2000

WHO ITA-124 -d RENZONI, A.
EVALUATION OF GENOTOXICITY OF METHYL-MERCURY BY EXAMINATION OF SISTER CHROMATID EXCHANGES IN FISHERMEN AT RISK IN THE TYRRHENIAN SEA

Diapartimento di Biologia Ambientale - Universita degli Studi di Siena, Siena, Italy

1989: 4000
1990: 3000
1991: Extended
Total (USD): 7000

WHO ITA-125 -d DELLA LOGGIA, R.
THE CUTANEOUS TOXICITY OF BLOOMS IN RELATION TO THEIR HEALTH HAZARD

Istituto di Farmacologia e Farmacognosia - Universita degli Studi di Trieste, Trieste, Italy

1989: 3000
1990: 3000
1991: Extended
Total (USD): 6000

WHO ITA-126 -a VOLTERRA, L.
ENTEROVIRUSES INDICATORS IN MARINE COASTAL ENVIRONMENTS

Istituto Superiore di Sanita - Ministero della Sanita, Rome (Roma), Italy

1989: 3000
1990: 3000
1991: Extended
Total (USD): 6000

WHO ITA-127 -g MELLUSO, G.
CHEMICAL AND MICROBIOLOGICAL EVALUATION OF POLLUTION IN WATER AND SEDIMENTS OF TWO RIVERS IN CAMPANIA REGION, ITALY

Cattedra di Igiene - Universita degli Studi di Napoli, Naples (Napoli), Italy

1989: 3000
1990: Nil
1991: Extended
Total (USD): 3000

WHO ITA-129 -III TORREGROSSA, M. V.
MUTAGENIC MARINE POLLUTANTS

Istituto di Igiene - Universita degli Studi di Palermo, Palermo (Sicily), Italy

1990: 4000
1991: Extended
Total (USD): 4000

WHO ITA-130 -III VALENTINO, L.
HEALTH EFFECTS OF MERCURY INGESTED THROUGH CONSUMPTION OF SEAFOODS. A SURVEY ON COASTAL POPULATION OF SICILY.

Istituto di Igiene - Universita degli Studi di Palermo, Palermo (Sicily), Italy

1990: 4000
1991: Extended
Total (USD): 4000

WHO ITA-131 -III DE FLORA, S.
IDENTIFICATION AND MODULATION OF PROTECTIVE FACTORS IN THE MARINE ENVIRONMENT

Facolta di Medicina, Istituto di Igiene - Universita degli Studi di Genova, Genoa (Genova), Italy

1990: 5000
1991: Extended
Total (USD): 5000

WHO MOR-4 -c BELEMLIH, A.
BILAN DES POLLUTIONS MICROBIENNES DES EAUX ET COQUILLAGES EN PARALLELE AVEC L'EUTROPHISATION ET LES FLORAISONS DU PLANCTON

Institut agronomique et veterinaire Hassan II - , Rabat, Morocco

1987: 3000
1988: Nil
1989: 3000
1990: Nil
1991: Extended
Total (USD): 6000

WHO MOR-8 -III HASSAR, M.
EVALUATION DE LA POLLUTION MICROBIENNE ET TOXICOLOGIQUE DES EAUX CONTIERES DE LA MEDITERRANNEE

National Institute of Hygiene - Ministry of Health, Rabat, Morocco

1990: 6000
1991: Extended
Total (USD): 6000

WHO MOR-9 -IV BOUCHRITI, N.
OCCURENCE OF ENTEROVIRUSES IN MOROCCAN MEDITERRANEAN COAST.

Laboratoire d'Hygiene et industrie des denrees alimentaires d'origine animale - Institut agronomique et veterinaire Hassan II, Rabat, Morocco

1991: 3000
Total (USD): 3000

WHO SPA-25 -d MARINO, M. G.	1987:	4000
ASSESSMENT OF SANITARY RISKS ASSOCIATED WITH TBT'S IN THE MARINE ENVIRONMENT	1988:	4000
	1989:	Nil
	1990:	Nil
Escuela Nacional de Sanidad - Universidad Complutense de Madrid, Madrid, Spain	1991:	Extended
	Total (USD):	8000
WHO SPA-26 -d ROMERO RAYA/J.J. BORREGO GARCI, P.	1988:	5000
EPIDEMIOLOGICAL STUDY ON BATHER FROM SEVERAL BEACHES IN MALAGA (SPAIN), ITA RELATIONSHIP TO THE DETECTION AND ENUMERATION OF PATHOGENIC MICROORGANISMS	1989:	3000
	1990:	Nil
	1991:	Extended
Faculta de Ciencias, Departamento de Microbiologia - Universidad de Malaga, Malaga, Spain	Total (USD):	8000
WHO SPA-30 -k BOSCH NAVARRO, A.	1989:	3000
THE SURVIVAL OF HUMAN ENTERIC VIRUSES IN SEAWATER	1990:	3000
	1991:	3000
Facultad de Biologia - Universidad de Barcelona, Barcelona, Spain	Total (USD):	9000
WHO SPA-31 -a ALONSO MOLINA, J. L.	1989:	3000
CONTROL OF NEW INTESTINAL PATHOGENS: CAMPYLOBACTER AND MOTILE AEROMONAS IN MARINE COASTAL RECREATIONAL AREAS IN VALENCIA, SPAIN.	1990:	3000
	1991:	3000
Institute of Hydrology and Environment - Polytechnical University, Valencia, Spain	Total (USD):	9000
WHO SPA-32 -a JOFRE TORROELLA, J.	1990:	3000
EVALUATION OF VIRAL CONTAMINATION OF SHELLFISH THROUGH ENUMERATION OF PHAGES INFECTING B. FRAGILIS.	1991:	Extended
Facultad de Biologia - Universidad de Barcelona, Barcelona, Spain	Total (USD):	3000
WHO SPA-35 -a BORREGO, J. J.	1990:	4000
COMPARISON OF METHODS FOR THE ISOLATION OF SALMONELLA FROM NATURAL WATERS	1991:	4000
Faculta de Ciencias, Departamento de Microbiologia - Universidad de Malaga, Malaga, Spain	Total (USD):	8000
WHO TUN-6 -III BEN AISSA, R.	1991:	5000
RECHERCHE DES BACTERIES ENTEROPATHOGENES DANS LES BIVALVES ET ETUDE DE LEUR CORRELATION AVEC LES INDICATEURS DE LA POLLUTION FECALE.		
Institut Pasteur de Tunis (IPT) - , Tunis, Tunisia	Total (USD):	5000
WHO TUR-19 -e CURI, K.	1987:	3500
COASTAL POLLUTION DUE TO SOLID WASTES AND ITS CONTROL BY PROPER DISPOSAL, RECYCLING AND REUSE	1988:	Nil
	1989:	Nil
	1990:	3000
Department of Chemical Engineering, Pollution Control Research Group - University of the Bosphorus, Istanbul, Turkey	1991:	Extended
	Total (USD):	6500
WHO YUG-91 -a PRESECKI, V.	1989:	3500
LABORATORY PROCEDURES FOR ENTEROVIRUSES, ROTA VIRUS AND HEPATITIS A VIRUS PRESENCE DETERMINATION IN SEAWATER, SEDIMENT AND SHELFISH (MUSSEL)	1990:	3000
	1991:	Extended
Institute of Public Health of SR Croatia - , Zagreb, Yugoslavia	Total (USD):	6500
WHO YUG-105 -g KURELEC, B.	1990:	3000
ANALYSIS OF DNA ADDUCTS AND OTHER BIOMARKERS AS A POSSIBLE TOOL FOR GENOTOXIC RISK ASSESSMENT IN THE AQUATIC ENVIRONMENT	1991:	Extended
Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia	Total (USD):	3000
WHO YUG-106 -d KRSTULOVIC, N.	1990:	3000
PRESENCE AND DENSITY OF SALMONELLA AND STAPHYLOCOCCUS AUREUS IN POLLUTED RECREATIONAL AREAS AND THEIR CORRELATION WITH BACTERIAL INDICATOR ORGANISMS	1991:	Extended
Institute of Oceanography and Fisheries - , Split, Yugoslavia	Total (USD):	3000

WMO

WMO FRA-15 -l MORELLI & C. MIGON, J.
CONTRIBUTION A L'ETUDE DU CYCLE DE METAUX POTENTIELLEMENT TOXIQUES DANS L'ENVIRONNEMENT ATMOSPHERIQUE MEDITERRANEEN. ORIGINES ET EVALUATION DE L'APPORT AU MILIEU MARIN

Ecole Normale Superieure - , Paris, France

1986: Nil
1987: 1000
1988: 3000
1989: Nil
1990: 3000
1991: Extended
Total (USD): 7000

WMO FRA-32 -l BUAT-MENARD, P.
DYNAMIQUE DU TRANSPORT ET DE LA RETOMBEE ATMOSPHERIQUEDES POLLUANTS METALLIQUES (CD, PB, ZN, CU) EN MER LIGURE: REPONSE DE LA COLONNE D'EAU AUX PERTURBATIONS INDUITES

Centre des faibles radioactivites, Laboratoire mixte (CNRS-CEA) - Centre National de la Recherche Scientific (CNRS), Gif-sur-Yvette, France

1986: Nil
1987: 3000
1988: 4000
1989: Nil
1990: 3000
1991: Extended
Total (USD): 10000

WMO ISR-21 -l MAHRER, Y.
THREE DIMENSIONAL MODELLING OF THE EFFECTS OF SEA AND LAND BREEZES ON POLLUTION TRANSPORT IN THE EASTERN MEDITERRANEAN SEA

Faculty of Agriculture - Hebrew University of Jerusalem, Jerusalem, Israel

1987: 3000
1988: Nil
1989: Nil
1990: 3000
1991: Extended
Total (USD): 6000

WMO ISR-22 -l WAKSHAL, E.
CHEMICAL COMPOSITION OF MAJOR ELEMENTS AND CADMIUM CONTENT OF RAINWATER AND SUSPENDED PARTICULATE MATTER ALONG THE CENTRAL COASTAL PLAIN OF ISRAEL

Hebrew University of Jerusalem - , Jerusalem, Israel

1987: 4500
1988: 3500
1989: Nil
1990: Nil
1991: Extended
Total (USD): 8000

WMO ITA-63 -l GUERZONI, S.
RIVERINE AND ATMOSPHERIC TRANSPORT OF DUSTS AND CONTAMINANTS INTO THE MEDITERRANEAN REGION

Istituto di Geologia Marina (IGM) - Consiglio Nazionale delle Ricerche (CNR), Bologna, Italy

1986: Nil
1987: 3500
1988: 3000
1989: Nil
1990: 4000
1991: Extended
Total (USD): 10500

WMO MOR-3 -l NEJJAR, M.
CONTRIBUTION A L'ETUDE DES MECANISMES DE TRANSFERTS DES POLLUANTS AUX POINTS DE CONTACT ENTRE LES COURS D'EAU ET LA MER ET A L'INTERFACE AIR/MER

Ecole Mohammadia d'Ingenieurs, Laboratoire de Pollution Atmospheric et Marine - Universite Mohammed V, Rabat, Morocco

1987: 1500
1988: Nil
1989: 5000
1990: Nil
1991: Extended
Total (USD): 6500

WMO SPA-8 -l CRUZADO, A.
STUDY OF LONG AND MEDIUM RANGE ATMOSPHERIC POLLUTANT TRANSPORT INTO THE NORTH WEST MEDITERRANEAN SEA

Centre de estudios avanzados de Blanes - Consejo Superior de Investigaciones Cientificas, Gerona, Spain

1985: 5000
1986: Nil
1987: Nil
1988: 3000
1989: Nil
1990: 3000
1991: Extended
Total (USD): 11000

WMO YUG-29 -l JANJIC, Z. I.
DEFINITION OF SYNOPTIC SCALE DRIVING PARAMETERS FOR A MODEL OF ATMOSPHERIC POLLUTION TRANSPORT TOWARDS AND INTO THE MEDITERRANEAN SEA

Federal Hydrometeorological Institute - , Belgrade, Yugoslavia

1988: 8500
1989: Nil
1990: Nil
1991: Extended
Total (USD): 8500

WMO YUG-73 -l KLASINC, L.
PHOTOCHEMICAL OXIDANTS IN THE TROPOSPHERE - SIGNIFICANCE OF LAND TO SEA TRANSPORT IN THE MEDITERRANEAN

Department of Physical Chemistry - University of Zagreb, Zagreb, Yugoslavia

1987: 3500
1988: Nil
1989: 5000
1990: Nil
1991: Extended
Total (USD): 8500

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2) LIST OF 1991 UNDECIDED PROJECTS

FAO

FAO GRE-89 -III NICOLAIDOU, ARTEMIS EFFECTS OF DUMPING OF SOLID WASTES ON MARINE BENTHIC COMMUNITIES Department of Biology, Zoological Laboratory and Museum - University of Athens, Athens, Greece	1991: Undecided
FAO GRE-96 -III CASTRITSI-CATHARIOS, J. ETUDE DE LA TOXICITE AIGUE ET DES EFFETS SUBLETAUX DES SUBSTANCES ORGANOSTANNIQUES A LA CHAINE ANIMENTAIRE Department of Biology, Zoological Laboratory and Museum - University of Athens, Athens, Greece	1991: Undecided
FAO ISR-47 -I KRESS, N. SCIENTIFIC AND STATISTICAL BASIS FOR THE DESIGN OF CHEMICAL MONITORING OF BIOLOGICAL MATERIAL Israel Oceanographic and Limnological Research Ltd. (IOLR) - , Haifa, Israel	1991: Undecided
FAO ISR-53 -III KRESS, N. BIOACCUMULATION OF METALS IN FISH: EFFECTS OF SEASON, SIZE AND SEX Israel Oceanographic and Limnological Research Ltd. (IOLR) - , Haifa, Israel	1991: Undecided

IAEA

IAEA EGY-16 -l MOUSSA, A. A. GEOCHEMICAL INTERACTION BETWEEN WASTE MATERIALS AND MARINE ENVIRONMENT National Institute of Oceanograpy and Fisheries (Alexandria Branch) - National Institute of Oceanography and Fisheries, Alexandria, Egypt	1988: Undecided 1989: Undecided 1990: Undecided 1991: Undecided
IAEA GRE-76 -a FYTIANOS, K. THE EFFECT OF SEA SURFACE MICROLAYER ENRICHMENT ON ORGANOTIN(TBT) FATE Chemistry Department - Aristotelian University of Thessaloniki, Thessaloniki, Greece	1990: Undecided 1991: Undecided
IAEA GRE-92 -IV VASILIKIOTIS, GEORGE DISTRIBUTION AND FATE OF CARBAMATE PESTICIDES IN SEAWATER OF THE THERMAIKOS GULF-GREECE Chemistry Department - Aristotelian University of Thessaloniki, Thessaloniki, Greece	1991: Undecided
IAEA ISR-48 -IV KRUMGALZ, B. SOME ASPECTS OF GEOCHEMICAL CYCLES OF HEAVY METALS IN ESTUARINE SEDIMENTS CONTAINING LARGE AMOUNTS OF ANTHROPOGENIC FLUORITE Israel Oceanographic and Limnological Research Ltd. (IOLR) - , Haifa, Israel	1991: Undecided
IAEA SYR-1 -IV NOUREDDIN, S. INVESTIGATIONS ON THE BEHAVIOUR OF Hg, Pb, Cu & Cd IN THE ALKABIR ALSHIMALI RIVER ESTUARY: - THEIR INPUT TO THE SYRIAN COASTAL WATERS, - THEIR ACCUMULATION AND SPECIATION IN THE ESTUARINE RECENT SEDIMENTS Marine Research Centre (MRC) - Tishreen University, Lattakia, Syrian Arab Republic	1991: Undecided
IAEA YUG-102 -a VUKADIN, I. ORGANOPHOSPHORUS COMPOUNDS IN WATER AND SEDIMENTS OF ADRIATIC SEA. Institute of Oceanography and Fisheries - , Split, Yugoslavia	1990: Undecided 1991: Undecided

IOC

IOC ISR-44 -II BOWMAN, D. 1991: Undecided
THREE DIMENSIONAL TRANSFER OF LITTER ACROSS WIDE BEACHES - TOWARDS POTENTIAL SINK AREAS FOR THE COASTAL WASTE?

Department of Geography - Ben Gurion University of the Negev,
Beersheba, Israel

WMO

WMO ITA-132 -II RAMPAZZO, G. 1991: Undecided
GEOCHEMISTRY (MAJOR AND MINOR ELEMENTS) OF ATMOSPHERIC DUSTS INTO THE MEDITERRANEAN REGION.

Facolta di Chimica Industriale, Dipartimento di Scienze Ambientale - Universita degli Studi di Venezia, Venice (Venezia), Italy

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WMO SPA-37 -II ALARCON, M. 1991: Undecided
AIR MASSES TRAJECTORIES IN THE NORTH WESTERN MEDITERRANEAN

Centre de estudios avanzados de Blanes - Consejo Superior de Investigaciones Cientificas, Gerona, Spain

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WMO YUG-107 -II ALEKSIC, N. 1991: Undecided
FEASIBILITY STUDY OF THE REAL TIME FORECASTING OF THE SO2 TRANSPORT AND DEPOSITION IN THE MEDITERRANEAN AREA

Institute of Physics - , Zemun, Yugoslavia

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3) LIST OF 1992 RESEARCH PROJECTS
(as of December 1991)

FAO

FAO EGY-22 -III ABOUL EZZ, S.M. — 1992: Undecided
EFFECT OF SEWAGE POLLUTION ON MARINE PLANKTON IN THE EASTERN MEDITERRANEAN (EGYPT)

National Institute of Oceanograpy and Fisheries (Alexandria Branch) - National Institute of Oceanography and Fisheries, Alexandria, Egypt

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FAO EGY-23 -III EL-KOMI, M.M. — 1992: Undecided
"ECOTOXICOLOGICAL TESTING WITH COMMON FOULING SPECIES"

National Institute of Oceanograpy and Fisheries (Alexandria Branch) - National Institute of Oceanography and Fisheries, Alexandria, Egypt

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FAO EGY-24 -III SHRIADAH, M.M. — 1992: Undecided
THE CORRELATION BETWEEN HEAVY METAL LEVELS AND ITS TOXICITY ON MARINE LIFE OF MEDITERRANEAN SEA.

National Institute of Oceanograpy and Fisheries (Alexandria Branch) - National Institute of Oceanography and Fisheries, Alexandria, Egypt

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FAO FRA-51 -IV GARRIGUES, P. — 1992: Undecided
ACCUMULATION ET BIOTRANSFORMATION DES CONTAMINANTS CHIMIQUES DANS LES MOLLUSQUES MARINS: APPLICATION A LA SURVEILLANCE DE L'ENVIRONNEMENT MARIN

Laboratoire de Photophysique et Photochimie Moleculaire - Universite de Bordeaux, Talence, France

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FAO ISR-54 -III YAWETZ, A. — 1992: Undecided
BIOMONITORING OF COASTLINE POLLUTION WITH CHEMICAL CARCINOGENS BY DETECTING INDUCTION OF CYTOCHROME P4501A1 GENE FAMILY IN LIVERS OF FISH FROM THE ISRAELI COAST OF THE MEDITERRANEAN SEA.

Institute for Nature Conservation Research - , Tel Aviv-Jaffa (Yafo), Israel

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FAO ISR-57 -III GASITH, A. — 1992: Undecided
BIOAVAILABILITY AND TOXICITY OF SEDIMENT BOUND TOXICANTS TO AQUATIC ORGANISMS: 1. SEDIMENT-ASSOCIATED METALS.

Institute for Nature Conservation Research - , Tel Aviv-Jaffa (Yafo), Israel

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FAO ITA-135 -III BARGHIGIANI, C. — 1992: Undecided
DETOXICANT AND PROTECTIVE MECHANISMS AGAINST HG AND CD IN OCTOPUS VULGARIS

Centro Interuniversitario di Biologia Marina - , Livorno, Italy

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FAO LEB-6 -III LAKKIS, S. — 1992: Undecided
LE PLANCTON DES ZONES EUTROPHIEES DE LA COTE LIBANAISE: STRUCTURE ET FONCTIONNEMENT DANS LE CADRE DE ACTIVITY "H": EUTROPHICATION AND CONCOMMITTANT PLANKTON BLOOMS

Marine Research Centre (MRC) - National Council for Scientific Research (NCSR), Jounieh, Lebanon

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FAO MAT-5 -III AXIAK, V. — 1992: Undecided
LABORATORY AND FIELD BIOASSAYS FOR ASSESSING ENVIRONMENTAL QUALITY OF COASTAL WATERS AND SEDIMENTS IN THE MEDITERRANEAN.

Department of Biology - University of Malta, Msida, Malta

FAO SPA-39 -IV HERNANDEZ, F. "BIOACCUMULATION, BIODEGRADATION AND PERSISTENCE OF SEVERAL ORGANOPHOSPHORUS & ORGANOCHLORINE PESTICIDES ON MEDITERRANEAN MARINE ORGANISMS OF COMMERCIAL INTEREST. TOXICITY STUDIES & ENVIRONMENTAL MONITORING". Environmental and Natural Resources Laboratory - University of Castellon, Castellon de la Plana, Spain	1992: Undecided
FAO SYR-5 -IV HAJ IBRAHIM, H. ACCUMULATION AND RELEASE OF HEAVY METALS IN ENTEROMORPHA COMPRESSA Environmental Studies Laboratory - High Institute of Applied Sciences and Technology, Damascus, Syrian Arab Republic	1992: Undecided
FAO SYR-6 -III MAYHOUB, H. EFFET DE LA POLLUTION SUR L'ECOSYSTEME PLANCTONIQUE DES EAUX COTIERES SYRIENNES (EN FACE DE LATAKYE). Marine Research Centre (MRC) - Tishreen University, Lattakia, Syrian Arab Republic	1992: Undecided
FAO TUN-7 -III EL-ABED, A. "IMPACTS DES REJETS POLLUANTS SUR LES CONCENTRATIONS EN METAUX TRACES TOXIQUES CHEZ LES ORGANISMES MARINS DANS LE GOLFE DE GABES" Ecole Nationale d'Ingénieurs de Sfax - Université de Sfax, Sfax, Tunisia	1992: Undecided
FAO YUG-111 -III RASPOR, B. METHOD FOR QUANTITATION OF METALLOTHIONEIN-LIKE PROTEINS IN MYTILUS GALLOPROVINCIALIS Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia	1992: Undecided
FAO YUG-114 -II LUCU, C. *INTERACTION OF LANTHANUM AND VANADIUM WITH TRANSPORT MECHANISMS OF* CADMIUM AND COPPER ACROSS GILL EPITHELIUM CELLS OF MARINE ORGANISMS Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided
FAO YUG-116 -III DUJMOV, J. "APPLICATION OF "MUSSEL WATCH" CONCEPT IN THE STUDIES OF DISTRIBUTION OF HYDROCARBONS IN EDIBLE SHELLFISH OF NERETVA DELTA" Institute of Oceanography and Fisheries - , Split, Yugoslavia	1992: Undecided
FAO YUG-117 -III LESKOVSEK, H. NATURE OF MACROAGGREGATES IN THE GULF OF TRIESTE (NORTHERN ADRIATIC) Institute Josef Stefan - Edvard Kardelj University (University of Ljubljana), Ljubljana, Yugoslavia	1992: Undecided
FAO YUG-118 -III BIHARI, N. GENOTOXICITY AND ACUTE TOXICITY ASSESSMENT IN WATER AND SEDIMENTS USING BACTERIAL SYSTEMS Centre for Marine Research - Rudjer Boskovic Institute, Rovinj, Yugoslavia	1992: Undecided
FAO YUG-119 -III BRITVIC, S. THE ENVIRONMENTAL IMPLICATIONS OF THE MULTIXENOBIOTIC-RESISTANCE MECHANISM EXPRESSED IN MARINE INVERTEBRATES Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided
FAO YUG-121 -III ZUTIC, V. RELATIONSHIP BETWEEN ORGANIC LOADS AND BOTTOM HYDOXIA IN A STRATIFIED ESTUARY Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided

IAEA

IAEA YUG-109 -IV PRAVDIC, V. 1992: Undecided
SUSPENDED PARTICULATE MATTER AS MARINE POLLUTANT VEHICLE FOR TRANSPORT FROM LAND-BASED SOURCES TO COASTAL ENVIRONMENTS

Centre for Marine Research - Rudjer Boskovic Institute, Zagreb, Yugoslavia

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IAEA YUG-122 -I TOMAIC, J. 1992: Undecided
DEVELOPMENT OF ELECTROCHEMICAL METHODOLOGY FOR DIRECT MEASUREMENTS OF DISSOLVED AND DISPERSED ORGANIC MATTER IN COASTAL AND ESTUARINE WATERS

Rudjer Boskovic Institute - , Zagreb, Yugoslavia

IOC

IOC ALG-10 -II CHOUIKHI, A. STUDY OF SOUTH MEDITERRANEAN SEA BY CHEMISTRY DYNAMIC AND POLLUTION APPLICATIONS SOSMED'S Institut des sciences de la mer et de l'amenagement du littoral (ISMAL) - , Alger, Algeria	1992: Undecided
IOC ISR-45 -I GITELSON, A. DEVELOPMENT OF REMOTE SENSING METHODS FOR MONITORING COASTAL WATER POLLUTION FROM LAND-BASED SOURCES The Jacop Blaustein Institute for Desert Research - Ben Gurion University of the Negev, Beersheba, Israel	1991: Not accepted 1992: Undecided
IOC LEB-7 -II KIBAR, N. STUDY OF CURRENT SYSTEM IN THE ZONE STRETCHING FROM BEIRUT TO BATROUN, LEBANON Marine Research Centre (MRC) - National Council for Scientific Research (NCSR), Jounieh, Lebanon	1992: Undecided
IOC YUG-112 -II PLANINC R. & FAGANELI J., SEDIMENTATION AND BENTHIC FLUXES OF SELECTED HEAVY METALS IN SHALLOW COASTAL WATERS (GULF OF TRIESTE, NORTHERN ADRIATIC) Institute of Biology - Edvard Kardelj University (University of Ljubljana), Ljubljana, Yugoslavia	1992: Undecided
IOC YUG-115 -II LEGOVIC, T. FATE OF PETROLEUM HYDROCARBONS IN COASTAL SEA: A MATHEMATICAL MODELLING STUDY Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided
IOC YUG-120 -II TOMAS, B. MONTE CARLO SIMULATION OF DISPERSION OF A POLLUTANT IN A COASTAL SEA Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided
IOC YUG-123 -II BOZIC, D. A MATHEMATICAL MODEL TO SIMULATE ALGAL BLOOMS Rudjer Boskovic Institute - , Zagreb, Yugoslavia	1992: Undecided

WHO

WHO FRA-50 -IV GAUTHIER, M.J. EXPRESSION GENIQUE CHEZ LES BACTERIES ENTERIQUES PATHOGENES DANS LES CNDITIONS MARINES Institut national de la sante et de la recherche medicale (INSERM) - Institut national de la sante et de la recherche medicale (INSERM), Nice, France	1992: Undecided
WHO ITA-133 -IV VOLTERRA, L. SURVIVAL OF ENTEROVIRUSES IN MARINE WATERS Istituto Superiore di Sanita - Ministero della Sanita, Rome (Roma), Italy	1992: Undecided
WHO YUG-113 -III BATEL, R. DNA INTEGRITY ALTERATIONS IN EVALUATING GENOTOXIC EFFECTS IN THE MARINE ENVIRONMENT Centre for Marine Research - Rudjer Boskovic Institute, Rovinj, Yugoslavia	1992: Undecided
WHO YUG-124 -III DREVENKAR, V. EVALUATION OF SELECTED ORGANOPHOSPHORUS AND TRIAZINIC COMPOUNDS IN THE AQUATIC ENVIRONMENT AND IN HUMANS Institute for Medical Research & Occupational Medicine - , Zagreb, Yugoslavia	1992: Undecided

WMO

WMO ISR-55 -II STEINBERGER, Y. AIRBORNE (PARTICULATE) TRANSPORT VIA THE NORTHERN NEGEV DESERT: QUANTITATIVE OCCURRENCE AND CHEMICAL COMPOSITION. Department of Life Sciences - Bar-Ilan University, Ramat-Gan, Israel	1992: Undecided
WMO ISR-56 -II MENACHEM, L. TRANSPORT AND DISPERSION OF POLLUTANTS ACROSS THE MEDITERRANEAN SEA Faculty of Mathematics & Nat. Sciences, School of Applied Sciences & Technology - Hebrew University of Jerusalem, Jerusalem, Israel	1992: Undecided
WMO TUR-26 -II SAYDAM, A.C. ATMOSPHERIC TRACE METAL TRANSPORT TO THE EASTERN MEDITERRANEAN Middle East Technical University, Institute of Marine Sciences - , Erdemli, Turkey	1992: Undecided
WMO YUG-110 -II TELENTA, B. COMPILATION OF MEDITERRANEAN EMISSION INVENTORY OF HEAVY METALS AND ACIDIFYING COMPOUNDS FOLLOWING THE ADOPTED PROCEDURES. Federal Hydrometeorological Institute - , Belgrade, Yugoslavia	1992: Undecided

UNEP

UNEP ITA-134 -m FERRARA, R. LEVELS AND TOXICITY OF MERCURY IN THE ADRIATIC SEA [MONITORING] Centro Interuniversitario di Biologia Marina - , Livorno, Italy	1992: *Undecided*
UNEP SPA-40 -m DOMINGO, J.L. MERCURY, CADMIUM, LEAD, CHROMIUM, COPPER AND ZINC CONCENTRATIONS IN WATER, ALGAES, MOLLUSCS AND SEDIMENTS FROM THE DELTA OF EBRO RIVER, SPAIN [MONITORING] Laboratory of Toxicology and Biochemistry - Universidad de Barcelona, Reus, Spain	1992: Undecided
UNEP YUG-125 - BLANUSA, M. LEAD AND CADMIUM EXPOSURE IN RELATION TO NUTRITIONAL FACTORS (EXPERIMENTAL STUDIES AND HUMAN MONITORING) Institute for Medical Research & Occupational Medicine - , Zagreb, Yugoslavia	1992: *Not accepted*

ANNEX XI

WORKPLAN FOR LBS IMPLEMENTATION

(1985 - 1995)

Indicative Workplan and timetable for the formulation of programme and measures in terms of Articles 4, 5, 6, 7 and 13 of the LBS Protocol from 1988 to 1995

(based on the calendar adopted by the Contracting Parties in 1985)

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
1.	Assessment of the state of pollution in the Mediterranean Sea by persistent synthetic materials which may float, sink or remain in suspension, and proposed measures	Article 5; Annex I	UNEP/MEDU, IOC, FAO	Dec. 1988	Adopted by C.P. 1991 MTS No 50
2.	Assessment of the state of pollution in the Mediterranean Sea by organophosphorus compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1988	Adopted by C.P. 1991 MTS No 58
3.	Assessment of the state of pollution in the Mediterranean Sea by organotin compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1988	Done. UNEP(OCA) MED WG.1/7 MTS No 33
4.	Completion and revision of the list of substances included in the groups contained in annexes I and II to the Protocol	Annexes I, & II	UNEP/MEDU, All Agencies	Dec. 1988	Continuously covered in the assessments
5.	Evaluation of *in situ* investigations on selected submarine outfalls to determine their efficiency and cost-effectiveness	Article 7, para 1(a)	UNEP/MEDU, WHO	Dec. 1988	Document prepared as part of the guidelines (see 21.) and being edited. To be presented at M.C. Meeting 1992
6.	Survey of the situation currently existing with regard to products, installations and other processes within the region actually or potentially causing significant pollution of the marine environment	Article 7, para 1(d)	UNEP/MEDU, WHO, UNIDO	Dec. 1988	Pending results of MED X bis

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
7.	Preparation of draft Annex IV Protocol concerning pollution from land-based sources transported by the atmosphere	Article 4	UNEP/MEDU, WMO	Dec. 1988	Annex IV adopted by C.P. 1991. For workplan of activities related to the implementation of Annex IV see appendix at page 8 of this Annex.
8.	Assessment of the state of pollution in the Mediterranean Sea by radioactive substances and proposed measures	Article 5; Annex I	UNEP/MEDU, IAEA	Dec. 1989	Adopted by C.P. 1991. To be published as MTS.
9.	Assessment of the state of pollution in the Mediterranean Sea by substances proven carcinogenic, teratogenic or mutagenic and proposed measures	Article 5; Annex I	UNEP/MEDU, WHO	Dec. 1989	Ready by February 1992. To be presented at N.C. Meeting 1992
10.	Assessment of the present state of pollution in the Mediterranean Sea by pathogenic microorganisms and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1989	Adopted by C.P. 1991. To be published as MTS.
11.	Compilation and evaluation of already existing international experience of use of alternative products and processes. In this regard, experiences on recycling and re-use of solid and liquid wastes will be taken into account	Article 7; para 1(d)	UNEP/MEDU, WHO, UNIDO	Dec. 1989	Activity to be discussed at 1992 N.C. Meeting.
12.	Assessment of the state of pollution by crude oils and hydrocarbons of any origin and proposed measures	Article 6; Annex II	UNEP/MEDU, IOC	Dec. 1990	Consult. in 1992. Ass. to be prepared for STC Meeting 1993
13.	Assessment of the state of pollution in the Mediterranean Sea by zinc and copper with proposed measures	Article 6; para 1(a)	UNEP/MEDU, FAO	Dec. 1990	Consult. in 90. Draft Ass. ready by the end of 1991
14.	Assessment of the present state of pollution in the Mediterranean Sea by nickel and chromium with proposed measures	Article 6, para II	UNEP/MEDU, FAO	Dec. 1990	Consult. in 90. Ass. to be prepared for N.C. Meeting 1992 (Chromium) and STC 1993 (Nickel)
15.	Assessment of the present state of pollution in the Mediterranean Sea by arsenic and lead with proposed measures	Article 6, Annex II	UNEP/MEDU, FAO	Dec. 1990	Consult. in 90. Ass. to be prepared for N.C. Meeting 1992
16.	Identification and categorisation of alternative products, installations and other processes capable of reducing pollution of the Mediterranean marine environment	Article 7, para 1(d)	UNEP/MEDU, WHO, UNIDO	Dec. 1990	Activity to be discussed at 1992 N.C. Meeting.

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
17.	Assessment of the present state of pollution in the Mediterranean Sea by inorganic compounds of phosphorus and elemental phosphorus and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1991	Ass. as part of 26.
18.	Assessment of the state of pollution in the Mediterranean Sea by non-biodegradable detergents and other surface-active substances and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1991	Consult. in Feb. 1992. Pilot project to be completed by end 1992
19.	Assessment of the present state of pollution in the Mediterranean Sea by thermal discharges and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1991	Consult. in 1992. Ass. for 1993 STC.
20.	Common guidelines for the determination of the length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pre-treatment of effluents	Article 7, para 1(a)	UNEP/MEDU, WHO, UNIDO	Dec. 1991	Document ready and being edited. Document to be presented at N.C. Meeting 1992 (includes 5.)
21.	Compilation of a Mediterranean inventory of effluents requiring special and/or separate treatment including type, category, amount, locality and existing treatment, if any, together with, wherever possible, those local characteristics influencing the effects of such effluents on the marine environment and the feasibility of separate and/or special treatment	Article 7, para 1(b)	UNEP/MEDU, WHO, UNIDO	Dec. 1991	Pending results of MED X bis
22.	Formulation of draft common guidelines, standards and criteria for special requirements for effluents necessitating separate treatment	Article 7, para 1(b)	UNEP/MEDU, WHO	Dec. 1991	Meeting in April 1992 to finalize guidelines
23.	Survey on the yield and the cost/benefit of the application of alternative products and processes	Article 7, para 1(d)	UNEP/MEDU, WHO	Dec. 1991	To be discussed at N.C. Meeting 1992.
24.	Assessment of the present state of pollution in the Mediterranean Sea by acid or alkaline compounds of such composition and in such quantity that they may impair the quality of seawater and proposed measures	Article 6, Annex II	UNEP/MEDU, WHO	Dec. 1992	Postponed to 1994-1995

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
25.	Assessment of the present state pollution in the Mediterranean Sea by substances which have, directly or indirectly, an adverse effect on the oxygen content of the marine environment, especially those which may cause eutrophication and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1992	Consult. in 1991. Ass. to be prepared by the end of 1992
26.	Assessment of the present state of pollution in the Mediterranean Sea by molybdenum, titanium, selenium, vanadium, cobalt and silver with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO/IAEA	Dec. 1992	Consult. in 1993. Ass. to be prepared for N.C. Meeting 1994
27.	Assessment of the present state of pollution in the Mediterranean Sea by cyanides and fluorides and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1993	Consult. in 1993. Ass. to be prepared for STC 1994
28.	Assessment of the present state of pollution in the Mediterranean Sea by substances which, though of a non-toxic nature, may become harmful to the marine environment or may interfere with any legitimate us of the sea owing to the quantities in which they are discharged and proposed measures	Article 6; Annex II	UNEP/MEDU, IMO	Dec. 1993	Consult. in 1994. Ass. to be prepared for STC 1995
29.	Assessment of the present state of pollution in the Mediterranean Sea by organosilicon compounds and substances which may form such compounds in the marine environment, excluding those which are biologically harmless or are rapidly converted into biologically harmless substances and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1993	Deleted from Annex II
30.	Assessment of the present state of pollution in the Mediterranean Sea by antimony, tin, boron, beryllium, barium, uranium, tellurium and thallium with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	Consult. in 1993. Ass. to be prepared for STC 1994
31.	Assessment of the present state of pollution in the Mediterranean Sea by substances which have a deterious effect on the taste and/or smell of products for human consumption derived from the aquatic environment, and compounds liable to give rise to such substances in the marine environment and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1994	Consult. in 1994. Ass. to be prepared for STC 1995

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
32.	Assessment of the present state of pollution in the Mediterranean Sea by herbicides and their derivatives not covered in Annex I and proposed Measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	Consult. in 1993. Ass. to be prepared for STC 1994
33.	Assessment of the present state of pollution in the Mediterranean Sea by fungicides and their derivatives not covered in Annex I and proposed Measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	Consult. in 1993. Ass. to be prepared for STC 1994
34.	Assessment of the present state of pollution in the Mediterranean Sea by other biocides other than fungides and herbicides and their derivatives not covered in Annex I and proposed Measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	Consult. in 1994. Ass. to be prepared for STC 1995

WORKPLAN FOR LBS IMPLEMENTATION
(1986 - 1987)

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
1.	Assessment of the state of microbial pollution in the Mediterranean Sea and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1985	To be revised in 1993
2.	Completion an revision of the Glossary	Protocol and annexes	UNEP/MEDU, WHO	Dec. 1986	Prepared: UNEP/WG.125/9. To be revised in 1992/93.
3.	List of substances falling within each of the groups in Annex I to the Protocol	Annex I	UNEP/MEDU, IRPTC, IAEA	Dec. 1986	Continuously covered in the assessments
4.	List of substances falling within each of the groups in Annex II to the Protocol	Annex II	UNEP/MEDU, IRPTC	Dec. 1986	Continuously covered in the assessments
5.	Assessment of the state of pollution in the Mediterranean Sea by used lubricating oils and proposed measures	Article 5; Annex I	UNEP/MEDU, UNIDO	Dec. 1986	Done: WG.3/Inf.4
6.	Survey of land-based sources and amounts of pollutants reaching the Mediterranean Sea	Article 5 & 6; Annex I and II	UNEP/MEDU, WHO	Dec. 1986	Questionnaire ready. Sent to N.C. in June 1989
7.	Assessment of the state of microbial pollution in the Mediterranean Sea and proposed measures for shellfish and shellfish-growing waters	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1986	Done: UNEP/WG.160/10. Consultation in 1993.
8.	An evaluation of the benefits limitations of submarine pipelines, whether or not associated with treatment plants, for discharge of liquid effluents	Article 7; para.1 (a)	UNEP/MEDU, WHO	Dec. 1986	See guidelines and MED X-bis
9.	Formulation of the procedure for the collection and submission of information from the parties on measures taken, results achieved and difficulties encountered in the application of the Protocol	Article 13	UNEP/MEDU, WHO	Dec. 1986	Formats ready by March 1992. Other aspects ongoing.

	Actions	Relevance to the Protocol	Responsible Agencies	Original target date	Present status
10.	Draft guidelines for the issue of authorization for the discharge of liquid wastes into the Mediterranean	Article 6	UNEP/MEDU, WHO	Dec. 1987	Done: ICP/CEH 082/6. Revised doc. to be prepared in 1992.
11.	Assessment of the state of pollution in the Mediterranean Sea by cadmium and cadmium compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Done: MTS No 34
12.	Assessment of the state of pollution in the Mediterranean Sea by organohalogen compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Done: MTS No 39. Consult. in 1990. Ass. for additional compounds in 1992
13.	Assessment of the state of pollution in the Mediterranean Sea by mercury and mercury compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Done: MTS No 18
14.	A comparative review of the various types of treatment existing in the Mediterranean area for wastewaters, with the view to their re-use or their discharge into the sea	Article 7; para 1(a)	UNEP/MEDU, WHO	Dec. 1987	Part of MED X Bis
15.	Compilation of detailed information on existing legislative measures regarding the discharge of wastes through submarine outfalls in Mediterranean countries together with similar information from selected countries outside the region, to enable comparison and evaluation of applicability and proposed measures	Article 7; para 1(a)	UNEP/MEDU, WHO	Dec. 1987	See 8.
16.	Identification and categorisation of effluents requiring special and/or separate treatment and listing of such treatment and/or other requirements normally associated with or advisable for such effluents	Article 7; para 1(b)	UNEP/MEDU, WHO, UNIDO	Dec. 1987	Annexes I and II ready. Consultation Meeting in April 1992.

APPENDIX

ANNEX XI

WORKPLAN FOR LBS IMPLEMENTATION
(1985 - 1995)

WORKPLAN FOR THE IMPLEMENTATION OF ANNEX IV TO THE LBS PROTOCOL DURING 1992-1993

	Actions	Target date
(1)	Establishment of an expert group on airborne pollution of the Mediterranean Sea[1/]	Feb. 1992
(2)	Compilation of a Mediterranean emission inventory of heavy metals (starting with Cd and Pb) following the adopted procedures	Dec. 1992
(3)	Compilation of a Mediterranean emission inventories for acidifying compounds following the adopted procedures	Dec. 1992
(4)	Assessment of airborne pollution of the Mediterranean Sea (primarily by heavy metals and acidifying compounds)	Dec. 1993

PRELIMINARY WORKPLAN FOR THE IMPLEMENTATION OF ANNEX IV TO THE LBS PROTOCOL DURING 1994-1995

	Actions	Target date
(1)	Compilation of information on existing legislative measures regarding the control of emissions of harmful substances into the atmosphere from various groups of sources	Sept. 1994
(2)	Initiation of collection and dissemination of information on existing air pollution control technologies (starting with heavy metals and acidifying compounds)	Sept. 1994
(3)	Identification and categorization of the most important groups of emission sources (starting with heavy metals) and preparation of general recommendations for control	Dec. 1994
(4)	Preparation of guidelines for inventory of emissions of other important pollutants (e.g. organic species)	March 1995
(5)	Reconsideration of the most important problems with regard to airborne pollution of the Mediterranean Sea and preparation of a plan for future actions	March 1995

1/ A meeting of the expert group could take place if hosted and finance by a Contracting Party.

ANNEX XII

MED POL MEETINGS TO BE HELD

IN 1992 AND 1993

MED POL MEETINGS TO BE HELD IN 1992

Meeting	Place	Date	Responsible Agency	No. of Partic.	Report issued by	Project Document (budget line)	Amount Alloc.
1. XXV IAAC Meeting	Athens	(Dec. 91)	UNEP	8	UNEP		-
2. Training workshop on the monitoring of biological effects of pollutants on marine organisms	Nice	14-26 September	FAO/IOC	15	FAO		40,000
3. Consultation meeting on guidelines on data quality assurance		March/April	IAEA	8	IAEA		15,000
4. Meeting of National Co-ordinators of MED POL	Athens	May	UNEP	8	UNEP		40,000
5. Training and Intercalibration exercise on determination of microbiological pollution		September/ October	WHO	15	WHO		25,000
6. Consultation meeting on MED POL data processing programme and guidance for future work	Athens	October/ November	UNEP	8	UNEP		15,000
7. Consultation meeting on the determination of pathogenic micro-organisms in coastal marine waters	Athens	October/ November	WHO	15	WHO		25,000
8. Consultation meeting on the evaluation of monitoring programme	Athens	November	UNEP	8	UNEP		20,000

MED POL MEETINGS TO BE HELD IN 1993

Meeting	Place	Date	Responsible Agency	No. of Partic.	Report issued by	Project Document (budget line)	Amount Alloc.
1. XXVI IAAC Meeting	Athens	(Dec. 92)	UNEP	8	UNEP		-
2. Training workshop on the monitoring and assessment of airborne pollution	Malta	January	WMO	15	WMO		25,000
3. Training workshop on the monitoring of chemical contaminants using marine sediments	Monaco	April/May	IAEA/IOC	15	IAEA		25,000
4. Consultation meeting on the treatment and discharge of toxic wastes	Athens	April/May	WHO	15	WHO		25,000
5. Joint Committees' Meeting	Athens	May	UNEP	50	UNEP		93,000
6. Training workshop on the monitoring of chemical contaminants using marine organisms	Athens	May/June	FAO/IAEA	25	FAO		40,000
7. Consultation meeting on the application of chemical tracers of domestic contaminants for marine pollution surveys	Monaco	September	IAEA/WHO	6	IAEA		15,000
8. Training and intercalibration exercise on the determination of microbiological pollution	Algiers	September/ October	WHO	15	WHO		25,000
9. Training workshop on collecting emission data for assessing airborne pollution 1/	?	November/ December	WMO	15	WMO		25,000*
10. Consultation meeting on MED POL data processing programme and guidance for future work	Athens	December	UNEP	8	UNEP		15,000

1/ This activity will be implemented only if unused MED POL funds are available.

ANNEX XIII

STATUS OF PREPARATION OF MED POL REFERENCE METHODS

(as approved at IAAC XXV, December 1991)

PARAMETERS	Ref. Method	Resp. Org.	Target Date*
A. EFFLUENTS			
CATEGORY I			
Total mercury	NA	WHO/IAEA	May 91
Total cadmium	NA	WHO/IAEA	May 91
Total suspended solids	NA	WHO/IAEA	May 91
Total phosphorus	NA	IAEA	Dec. 91
Total nitrogen	NA	IAEA	Dec. 91
Faecal coliforms	3,22	WHO	-
BOD/COD	NA	IAEA	Dec. 91
HMW HH	NA	IAEA	Dec. 91
CATEGORY II			
Petroleum hydrocarbons	NA	IAEA	Dec. 91
Detergents	NA	WHO/IAEA	Dec. 91
Phenols	NA	WHO/IAEA	Dec. 91
Total chromium	NA	WHO/IAEA	Oct. 91
Selected radionuclides	?	IAEA	Dec. 90
B. COASTAL WATERS AND REFERENCE AREA			
CATEGORY I			
Total mercury in organisms	8	FAO/IOC/IAEA	-
Total mercury in sediments	26	IAEA	-
Organic mercury in organisms	13	FAO/IAEA	-
Cadmium in organisms	11	FAO//IOC/IAEA	-
Cadmium in sediments	27	IAEA	-
HMW HH in organisms	14,40	FAO/IOC/IAEA	-
HMW HH in sediments	17	IAEA	-
Faecal coliforms in recreational waters	3,22	WHO	-
Faecal coliforms in bivalves	5	WHO	Jan. 91 (revision)

NA = Not Available
* = Subject to availability of funds
\- = Available

PARAMETERS	Ref. Method	Resp. Org.	Target Date*
CATEGORY II			
Basic oceanographic parameters	NA	IOC/IAEA	Dec. 91
Basic meteorological parameters	49	IOC/IAEA	-
Standard chemical methods for marine environmental monitoring	50	IOC/IAEA	-
Floating tar	NA	IOC	Dec. 91
Tar balls on beaches	15	IOC/IAEA	-
Total arsenic in organisms	9	FAO/IAEA	-
Radionuclides in organisms	-	IAEA	Ready (IAEA doc.)
Pathogenic microorganisms[1)]	28,29,30	WHO/IAEA	-
Other Pathogenic organisms	n	WHO	Jan. 91
PAH's in organisms	AI	IAEA	Dec. 91

1) = Salmonella, Pseudomonas, Staphylococcus

C. ESTUARIES

CATEGORY I			
Total mercury in organisms	8	FAO/IOC/IAEA	-
Total mercury in sediments	26	IAEA	-
Organic mercury in organisms	13	FAO/IAEA	-
Total cadmium in organisms	11	FAO/IOC/IAEA	-
Total cadmium in sediments	27	IAEA	-
HMW HH in organisms	14,40	FAO/IOC/IAEA	-
HMW HH in sediments	17	IAEA	-
Faecal coliforms in water and bivalves	3,5,22	WHO	-
Total phosphorus in water	NA	IAEA	Dec. 91
Total phosph. in suspended matter	52	IAEA	-
Total nitrogen in water	NA	IAEA	Dec. 91
Total nitrogen in suspended matter	53	IAEA	-
Total suspended matter	41	IAEA/IOC	-
BOD/COD	G	IAEA/IOC	-
Basic oceanographic parameters	NA	IOC/IAEA	Dec. 91
Basic meteorological parameters	49	IOC/IAEA	-
Standard chemical methods for marine environmental monitoring	50	IOC/IAEA	-
CATEGORY II			
Radionuclides in organisms	-	IAEA	Ready (IAEA doc.)
PAH's in organisms	AI	IAEA	Jan. 91
Phenols in water	NA	IAEA	Dec. 91

PARAMETERS	Ref. Method	Resp. Org.	Target Date*
D. AIRBORNE			
I. PRECIPITATION			
Ph, Conductivity, Acidity, Alkalinity, $SO4^{2-}$-S, NH4*, $NO3^{-}$-N, Na, K, Mg, Ca, Cl	24[a]	WMO/IAEA	-
Cd, Pb, Cu, Zn	24[a],42	WMO/IAEA	-
Radionuclides	?	IAEA	?
Organic compounds	NA	IAEA/WMO	1992
Precipitation amount	24	WMO/IAEA	-
II. Particles			
$SO4^{2-}$-S, Na, Al	23[a]	WMO/IAEA	-
Cd, Pb, Cu, Zn	24,42	WMO/IAEA	-
Radionuclides	?	IAEA	?
Organic compounds	NA	IAEA/WMO	1992
Total SPM	24	IAEA/WMO	-
Air volume	24	WMO/IAEA	-
III. GAS			
O_3[b]	NA	WMO	1992
IV. METEOROLOGICAL PARAMETERS			
Wind speed, Wind direction, Air temperature, Sea surface temperature, Dew point, Relative humidity, Barometric pressure	49	IOC/WMO/IAEA	-

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[a] Sampling only
[b] At impact stations
* = Subject to availability of funds
\- = Available

ANNEX XIV

MAP TECHNICAL REPORT SERIES VOLUMES

1) SCHEDULED VOLUMES (1991-1992)

	Title	Pages	Target date	Agency	MTS No.
1.	Assess. Radioactivity	150 pp	Dec. 91	IAEA	
2.	La Spezia proceedings	150 PP	Dec. 91	WHO/FAO	
3.	Common Measures '85-'91	150 pp	Feb. 92	UNEP	
4.	Activity L. Reports and Workshop	150 pp	Feb. 92	WMO	
5.	IAEA/UNEP/IOC/FAO MED POL Organohalogen Workshop	100 pp	March 92	IAEA	
6.	Climatic change scenaria	150 pp	March 92	UNEP	
7.	Physical processes	150 pp	June 92	IOC	
8.	Activity A+K+L. Final reports	150 pp	June 92	IAEA	
9.	Activity F. Reports	150 pp	Oct. 92	IOC	

2) PUBLISHED VOLUMES (1991)

38. UNEP: Common measures adopted by the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against pollution. MAP Technical Reports Series No. 38. UNEP, Athens, 1990 (100 pages) (English, French, Spanish and Arabic).

39. UNEP/FAO/WHO/IAEA: Assessment of the state of pollution of the Mediterranean Sea by organohalogen compounds. MAP Technical Reports Series No. 39. UNEP, Athens, 1990 (224 pages) (English and French).

40. UNEP/FAO: Final reports on research projects (Activities H,I and J). MAP Technical Reports Series No. 40. UNEP, Athens, 1990 (125 pages) (English and French).

41. UNEP: Wastewater reuse for irrigation in the Mediterranean region. MAP Technical Reports Series No. 41. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1990 (330 pages) (English and French).

42. UNEP/IUCN: Report on the status of Mediterranean marine turtles. MAP Technical Reports Series No. 42. UNEP, Athens, 1990 (204 pages) (English and French).

43. UNEP/IUCN/GIS Posidonia: Red Book "Gérard Vuignier", marine plants, populations and landscapes threatened in the Mediterranean. MAP Technical Reports Series No. 43. UNEP, Athens, 1990 (250 pages) (French only).

44. UNEP: Bibliography on aquatic pollution by organophosphorus compounds. MAP Technical Reports Series No. 44. UNEP, Athens, 1990 (98 pages) (English only).

45. UNEP/IAEA: Transport of pollutants by sedimentation: Collected papers from the first Mediterranean Workshop (Villefranche-sur-Mer, France, 10-12 December 1987). MAP Technical Reports Series No. 45. UNEP, Athens, 1990 (302 pages) (English only).

46. UNEP/WHO: Epidemiological studies related to environmental quality criteria for bathing waters, shellfish-growing waters and edible marine organisms (Activity D). Final report on project on relationship between microbial quality of coastal seawater and rotarus-induced gastroenterities among bathers (1986-88). MAP Technical Reports Series No.46, UNEP, Athens, 1991 (64 pages) (English only).

47. UNEP: Jellyfish blooms in the Mediterranean. Proceedings of the II workshop on jellyfish in the Mediterranean Sea. MAP Technical Reports Series No.47. UNEP, Athens, 1991 (320 pages) (parts in English or French only).

48. UNEP/FAO: Final reports on research projects (Activity G). MAP Technical Reports Series No. 48. UNEP, Athens, 1991 (126 pages) (parts in English or French only).

49. UNEP/WHO: Biogeochemical cycles of specific pollutants. Survival of pathogens. Final reports on research projects (Activity K). MAP Technical Reports Series No. 49. UNEP, Athens, 1991 (71 pages) (parts in English or French only).

50. UNEP: Bibliography on marine litter. MAP Technical Reports Series No. 50. UNEP, Athens, 1991 (62 pages) (English only).

51. UNEP/FAO: Final reports on research projects dealing with mercury, toxicity and analytical techniques. MAP Technical Reports Series No. 51. UNEP, Athens, 1991 (166 pages) (parts in English or French only).

52. UNEP/FAO: Final reports on research projects dealing with bioaccumulation and toxicity of chemical pollutants. MAP Technical Reports Series No. 52. UNEP, Athens, 1991 (86 pages) (parts in English or French only).

53. UNEP/WHO: Epidemiological studies related to environmental quality criteria for bathing waters, shellfish-growing waters and edible marine organisms (Activity D). Final report on epidemiological study on bathers from selected beaches in Malaga, Spain (1988-1989). MAP Technical Reports Series No. 53. UNEP, Athens 1991 (127 pages) (English only).

54. UNEP/WHO: Development and testing of sampling and analytical techniques for monitoring of marine pollutants (Activity A): Final reports on selected microbiological projects. MAP Technical Reports Series No. 54. UNEP, Athens, 1991 (83 pages) (English only).

55. UNEP/WHO: Biogeochemical cycles of specific pollutants (Activity K): Final report on project on survival of pathogenic organisms in seawater. MAP Technical Reports Series No. 55. UNEP, Athens, 1991 (95 pages) (English only).

56. UNEP/IOC/FAO: Assessment of the state of pollution of the Mediterranean Sea by persistent synthetic materials which may float, sink or remain in suspension. MAP Technical Reports Series No. 56. UNEP, Athens, 1991 (113 pages) (English and French).

57. UNEP/WHO: Research on the toxicity, persistence, bioaccumulation, carcinogenicity and mutagenicity of selected substances (Activity G): Final reports on projects dealing with carcinogenicity and mutagenicity. MAP Technical Reports Series No. 57. UNEP, Athens, 1991 (59 pages) (English only).

58. UNEP/FAO/WHO/IAEA: Assessment of the state of pollution of the Mediterranean Sea by organophosphorus compounds. MAP Technical Reports Series No. 58. UNEP, Athens, 1991 (122 pages) (English and French).

ANNEX XV

1) Tasks from Contracting Parties Meeting in Cairo (IG. 2/4)

2) Tasks from Scientific and Technical Committee Meeting in Athens (WG. 25/5

3) Tasks from XXIV Meeting of the Inter-Agency Advisory Committee (IAAC) for MED POL (WG. 24/1)

TASKS FROM CONTRACTING PARTIES MEETING IN CAIRO (IG.2/4)

Para.	Subject	Responsible Organization	Action and deadline
Main text of report			
51.	Pollution from North and South	UNEP	Discuss at N.C. Meeting 1992
61.	Agencies'staff	All Agencies/UNEP	Discuss at Bureau
81.	Study on evaluation of microbial pollution	WHO	Document to be prepared for N.C. Meeting 1992
82.	Study on waste water collection and treatment	WHO	Document to be prepared for N.C. Meeting 1992
Recommendations (annex IV part I)			
A.3.1	Complete geographical coverage of monitoring	UNEP	
A.3.1	Include airborne monitoring whenever possible	WMO/UNEP	
A.3.2	Eutrophication research	All Agencies/UNEP	
B.5.2	LBS questionnaire	WHO	Report progress to N.C. Meeting 1992
E.8.6	Implementation of CAMPS	UNEP	
F.9.7	Implementation of Annex IV LBS	WMO/UNEP	
F.9.9	Organophosphorus measures	FAO/UNEP	letter to Contracting Parties
F.9.10	Pers.Synth. materials measures	FAO/IOC/UNEP	letter to Contracting Parties
F.9.11	Radioactive subst. measures	IAEA/UNEP	letter to Contracting Parties
F.9.12	Pathogenic micro-org. measures	WHO/UNEP	letter to Contracting Parties

TASKS FROM CONTRACTING PARTIES MEETING IN CAIRO (IG.2/4) (CONTINUED ./..2)

Para.	Subject	Responsible Organization	Action and deadline
Budget (annex II part II)			
A.1	Joint Committees Meeting 1993	All Agencies/UNEP	Documents to be prepared by February 1993
A.2	IAACs' Meetings	All Agencies/UNEP	December 1992/December 1993
A.3	Assist. monitoring	All Agencies/UNEP	
A.3	Assist. for eutrophication monitoring	UNEP	Consult. Meeting in January/February 1992
A.3	Maintenance	IAEA	
A.3	Consultants for MED POL Data	UNEP	
A.3	On-job Training	UNEP	
A.3	Fellowship	UNEP	
A.3	Data Quality Assurance	IAEA	
A.3	Intercalibration	IAEA	
A.3	MED POL Co-ordinators Meetings	All Agencies/UNEP	Meeting to be held on 6-9 May 1992. Documents to be prepared by beginning of February 1992

TASKS FROM SCIENTIFIC AND TECHNICAL COMMITTEE MEETING IN ATHENS (WG.25/5)

Para.	Subject	Responsible Organization	Action and deadline
87.	Analysis of pollution trends	All Agencies/UNEP	For N.C. Meeting 1992

TASKS FROM XXIV MEETING OF THE INTER-AGENCY ADVISORY COMMITTEE (IAAC) FOR MED POL (WG.24/1)

Para.	Subject	Responsible Organization	Action and deadline
5.	Presentation of monitoring results to Contracting Parties Meeting in Cairo	All Agencies/UNEP	For N.C. Meeting 1992
6.	Summary table on monitoring programmes and data	All Agencies/UNEP	For N.C. Meeting 1992
7.	Analysis of monitoring data and reports	All Agencies/UNEP	Continuous
8.	Pilot projects on item 1 of Annex II	FAO	1992-1993
8.	Pilot projects on detergents	WHO	1992-1993
8.	Pilot projects on herbicides	FAO	1991
8.	Pilot projects on fungicides	FAO	1993
10.	Use of intercalibration exercise	All Agencies/UNEP	Continuous
13.	Manual for the computerization of monitoring data	UNEP	1991
14.	Entering and processing of HM and HH data	UNEP/FAO/IAEA	1991
14.	Entering and processing of microbial data	UNEP/WHO	1991
21.	New format of Monitoring Agreements	UNEP	1992
23.	Selection of elements for pilot projects (Sb, Sn, Ba, Be, B, U, Tl, Te)	FAO	1991
28.	Preparation of new phase of MED POL	All Agencies/UNEP	Meeting in November 1992; for discussion at STC 1993
29.	Preparation of terminal reports for 81-01	All Agencies/UNEP	1992

ANNEX XVI

Draft Agenda for

THE Meeting of MED POL National Co-ordinators

Athens, 6-9 May 1992

1. Opening of the meeting
2. Rules of procedures
3. Election of Officers
4. Adoption of the Agenda and organization of work
5. Progress report on the implementation of MED POL in 1991
   - 5.1 Monitoring
   - 5.2 Data Quality Assurance, Intercalibration and Maintenance
   - 5.3 Data processing
   - 5.4 Implementation of LBS activities
   - 5.5 Research
   - 5.6 Documentation
   - 5.7 Climatic changes
6. Assessment of the state of pollution in the Mediterranean Sea by substances proven carcinogenic, teratogenic or mutagenic and proposed measures
7. Progress reports on the implementation of the Dumping Protocol
8. Review of 1992 ongoing and planned MED POL activities
9. Other business
10. Adoption of the report
11. Closure of the Meeting

ANNEX XVII

1992 MED POL BUDGET

(as approved by the Contracting Parties)
(as agreed by the IAAC meeting, 2-5 December 1991)

Annex II

Assessment of Environmental Problems

Short-term Objectives:

To strengthen national capabilities for measuring pollution in the Mediterranean Sea through a co-ordinated monitoring and research programme, including collection of relevant data.

Achievement Indicators:

Number of national institutions participating in the monitoring and research programme and improved quality of data.

UNEP/MEDU

Workplan:	Timetable	Responsibility
Assistance to about 80 institutions participating in monitoring programmes through provision of instruments and supplies (sub-contracts)	Continuous 1992	UNEP/MEDU and cooperating agencies
Assistance to institutions for monitoring of plankton blooms and eutrophication (sub-contracts)	Continuous 1992	UNEP/MEDU and cooperating agencies
Consultants to prepare documents on analysis and data processing of MEDPOL data	Continuous 1992	UNEP/MEDU and cooperating agencies
Consultation meeting on MEDPOL data processing programme and guidance for future work (8 participants)	November 1992	UNEP/MEDU
Consultation meeting on the evaluation of monitoring programmes (8 participants)	November 1992	UNEP/MEDU
Meeting of National Co-ordinators of MED POL	May 1992	UNEP/MEDU
Assistance for on-job training to about 40 participants in MEDPOL monitoring programme	Continuous 1992	UNEP/MEDU and cooperating agencies
Assistance for fellowships to 70 persons participating in MEDPOL research and monitoring programme to present MEDPOL data at meetings	Continuous 1992	UNEP/MEDU and cooperating agencies

Workplan	Timetable	Responsibility
Assistance to about 20 institutions participating in monitoring programmes in order to assure reliable and high quality data quality assurance programmes, joint monitoring exercises, inter-comparison of results (sub-contracts)	Continuous 1992	UNEP/MEDU with IAEA
Printing of proceedings of the 11th ICSEM/IOC Workshop on Mediterranean marine pollution (sub-contracts)	May 1992	UNEP/MEDU with ICSEM

Outputs:

- Eighty Mediterranean institutions assisted to participate in monitoring programmes through equipment and supplies.
- Several institutions assisted for the monitoring of the plankton blooms and eutrophication.
- MED POL data analyzed by five consultants.
- Forty participants from Mediterranean coastal states trained in various aspects of marine pollution monitoring in the framework of MED POL programme.
- Seventy fellowships for Mediterranean coastal states to present MED POL data at meetings.
- Twenty institutions participating in monitoring programmes assisted to provide reliable and high quality data.
- Thirty research grants awarded to Mediterranean institutions participating in research projects.
- Progress of the MED POL programme reviewed and new common measures adopted by the meeting of National Co-ordinators for MED POL.
- Evaluation of the monitoring programme and guidelines for future work on data processing.

Use of output:

- Information contained in annual monitoring reports by individual countries and in final reports of research projects will be used for the preparation of assessment documents and for the preparation of common measures to be used by Contracting Parties.
- Successfully trained experts will ensure improved quality of data, particularly for reporting of monitoring results. Target groups are experts working on the measurements of pollution parameters.

1992 Budget as approved by the Contracting Parties (in US dollars)	MTF	EF
Monitoring		
- Assistance to institutions participating in monitoring programmes, through provision of instruments and supplies (about 80 institutions) (Sub-contracts)	180,000	-
- Assistance to institutions for monitoring of plankton blooms and eutrophication (Sub-contracts)	20,000	20,000
- Consultants to prepare documents on analysis and data processing of MED POL data	20,000	10,000
Training and fellowships		
- On-job training of participants in MED POL monitoring programme (about 40 participants)	80,000	-
- Fellowships to participants in MED POL research and monitoring programme in order to present MED POL data at meetings	70,000	-
Data quality assurance		
- Assistance to institutions participating in monitoring programmes in order to assure reliable and high quality data, through country data quality assurance programmes, joint monitoring exercises, intercomparison of results and dissemination of scientific information (about 20 institutions) (Sub-contracts)	50,000	20,000
Meetings and training courses		
- Meeting of National Co-ordinators of MED POL	40,000	-
- Consultation meeting on MED POL data processing programme and guidance for future work (about 8 participants)	15,000	-
- Consultation meeting on the evaluation of monitoring programmes (about 8 participants)	20,000	-
Assessment of pollution		
- Printing of Proceedings of the 11th ICSEM/UNEP/IOC Workshop on Mediterranean marine pollution (Sub-contracts)	10,000	-

Co-operating Agencies: WHO, FAO, IAEA, WMO, IOC/UNESCO.

Workplan	Timetable	Responsibility
Assistance to about 80 institutions participating in monitoring programmes through provision of instruments and supplies (sub-contracts)	Continuous 1992	FAO, WHO, WMO, with cooperating institutions
Maintenance of instruments provided to about 40 institutions participating in MEDPOL (spare parts)(sub-contracts)	Continuous 1992	IAEA with cooperating institutions
Intercalibration exercise with 40 institutions (sub-contracts)	Continuous 1992	IAEA with cooperating institutions
Assistance to 40 institutions participating in monitoring programmes (purchase of standards and reference materials)	Continuous 1992	IAEA
Assistance to about 25 institutions participating in research programme (sub-contracts)	Continuous 1992	FAO, WHO, IOC, WMO, IAEA
Training and Intercalibration exercise on determination of microbiological pollution (about 15 trainees)		WHO
Training workshop on the monitoring of biological effects of pollutants on marine organisms (about 15 participants)	Sept. 1992	FAO/IOC/UNEP
Consultation meeting on the determination of pathogenic micro-organisms in coastal marine waters		WHO
Establishment of an expert group on airborne pollution of the Mediterranean Sea	Feb. 1992	WMO
Compilation of a Mediterranean emission inventory of heavy metals (starting with Cd and Pb) following the adopted procedures	Dec. 1992	WMO
Compilation of a Mediterranean emission inventories for acidifying compounds following the adopted procedures	Dec. 1992	WMO

Output:

- Eighty Mediterranean institutions assisted to participate in the monitoring programmes through equipment and supplies.

- Forty Mediterranean institutions participating in the MED POL, assisted through the maintenance of instruments and intercalibration exercise.

- Forty institutions participating in monitoring programmes assisted through the purchase of standards and reference material.

- Fifteen national officials trained in determination of microbiological pollution.

- Fifteen participants trained in monitoring of biological effects.

- Emission inventory of heavy metals for airborne pollution and acidifying compounds.

- Recommendations on methods of determination of pathogenic micro-organisms in coastal marine waters.

Use of Output:

- Information contained in annual monitoring reports by individual countries and in final reports of research projects will be used for the preparation of assessment documents and for the preparation of common measures to be used by Contracting Parties.

- Successfully trained experts will ensure improved quality of data, particularly for reporting of monitoring results. Target groups are experts working on the measurements of pollution parameters.

1992 Budget as approved by the Contracting Parties (in US dollars)

	M T F -	SUB-CONTRACTS		
	FAO	WHO	UNESCO/ IOC	WMO	IAEA
Professional Staff					
- WHO Senior Scientist - MAP Co-ordinating Unit (Athens) - P.5	-	86,000	-	-	-
- FAO Senior Fishery Officer - MAP Co-ordinating Unit (Athens) - P.5	86,000	-	-	-	-
- IAEA Maintenance Engineer (ILMR) (Monaco) - P.3	-	-	-	-	80,000
Administrative Support					
- WHO Secretary - WHO/EURO (Copenhagen)- G.4	-	13,000	-	-	-
- WHO Secretary - MAP Co-ordinating Unit (Athens) - G.5	-	19,000	-	-	-
- FAO Secretary - MAP Co-ordinating Unit (Athens) - G.4	18,000	-	-	-	-
- IAEA Laboratory Assistant - ILMR (Monaco) - G.5		-	-	-	38,000
- WMO Temporary Assistance - WMO/HQ (Geneva)	-	-	-	8,000	-
Travel on Official Business	12,000	12,000	6,000	8,000	24,000
Sub-contracts					
- Assistance to institutions participating in monitoring programmes	145,000	145,000	-	60,000	-
- Assistance to institutions participating in research programmes	35,000	30,000	15,000	10,000	10,000
- Maintenance of instruments provided to institutions participating in MEDPOL	-	-	-	-	40,000
- Assistance to 40 institutions participating monitoring programmes (purchase of standards and reference materials)	-	-	-	-	15,000

	M T F - SUB-CONTRACTS				
	FAO	WHO	UNESCO/ IOC	WMO	IAEA
Group training, meetings, etc.					
- Intercalibration and training course on determination of microbiological pollution	-	25,000	-	-	-
- Training workshop on the monitoring of biological effects of pollutants on marine organisms (about 15 participants, two weeks)	40,000	-	-	-	-
Meetings					
- Consultation meeting on the determination of pathogenic micro-organisms in coastal marine waters	-	25,000	-	-	-
Non-Expendable Equipment					
- Laboratory equipment for ILMR (Intercalibration exercise)	-	-	-	-	13,000

Annex III

Development of Environmental Protection Measures

A. Measures Against Land-Based Sources of Pollution

Short-term Objectives:

To strengthen national capabilities of the Mediterranean coastal States to implement the Land-based sources Protocol (LBS) through the adoption of common measures.

Achievement Indicators:

Number of countries participating in the research of the Land-based Protocol.
Adoption of common measures for the implementation of the Protocol of the LBS.

UNEP/MEDU

Workplan:	Timetable	Responsibility
Assistance to countries to implement the LBS Protocol	Continuous 1992	UNEP/MEDU
Consultants to prepare documents on assessments of the Mediterranean pollution by LBS substances (consultants)	Continuous 1992	UNEP/MEDU and cooperating agencies

Outputs:

- Contracting Parties assisted in the implementation of the LBS Protocol.
- Report on assessments of Mediterranean pollution by LBS substances, to be disseminated to all MAP focal points and institutions in Mediterranean coastal states.

Use of Outputs

- Improvement of the implementation of the LBS Protocol.
- Assessment documents with proposed measures will be used for the assessment of the state of pollution and as a base for the implementation of the LBS Protocol.

1992 Budget as approved by the Contracting Parties (in US dollars)

	MTF
Assistance	
- Assistance to countries to implement the LBS Protocol	30,000
Assessment of the pollution	
- To prepare documents on assessments of Mediterranean pollution by LBS substances (Consultants)	18,000

B. Measures Against Maritime Sources of Pollution

Short-term Objectives:

- To improve the control on dumping in the Mediterranean Sea, in line with the protocol on dumping.

Achievement Indicators:

- Regular and complete national reports on dumping in the Mediterranean Sea.

UNEP/MEDU

Workplan	Timetable	Responsibility
Protocol on dumping:		
To receive national reports on permits issued and quantities dumped	Continuous 1992	UNEP/MEDU
To prepare a consolidated report for the Contracting Parties	Continuous 1992	UNEP/MEDU

Outputs:

- Consolidated report on dumping permits and quantities dumped for the Contracting Parties.

Co-operating Agencies: WHO, FAO, IAEA, WMO, IOC/UNESCO.

Workplan	Timetable	Responsibility
Pilot project on monitoring of Ti, Be, Co, Tl, Sb, Ag, Mo, V and U (Sub-contracts)		FAO
Assessment of airborne pollution in the Mediterranean Sea (Sub-contracts)		WMO
Assessment of the state of pollution of the Mediterranean Sea by Ti, Be, Co, Tl, Sb, Ag, Mo, V and U		FAO
Assessment of the state of pollution of the Mediterranean Sea by herbicides and fungicides		FAO
Assistance to 60 institutions participating in research programmes (sub-contracts)	Continuous 1992	FAO, WHO, IOC, WMO, IAEA with co-operating Institutions

Outputs:

- Progress report on the pilot project on monitoring of selected chemical elements and their compounds listed in item 1 of Annex II of the LBS Protocol.
- Report on the assessment of the state of pollution in the Mediterranean Sea by herbicides and fungicides, to be disseminated to all MAP focal points and institutions in Mediterranean coastal states.
- Seventy research grants to sixty Mediterranean institutions participating in research programmes.
- Report on the assessment of the state of pollution in the Mediterranean by selected elements.
- Report on the assessment of the state of pollution in the Mediterranean by herbicides.

Use of outputs:

- Information contained in annual monitoring reports by individual countries and in final reports of research projects will be used for the preparation of assessment documents and for the preparation of common measures to be used by Contracting Parties.
- Successfully trained experts will ensure improved quality of data, particularly for reporting of monitoring results. Target groups are experts working on the measurements of pollution parameters.

This activity uses the administrative support and the professional staff provided under the previous activities.

1992 Budget as approved by the Contracting Parties (in US dollars)

	M T F - SUB-CONTRACTS				
	FAO	WHO	UNESCO/ IOC	WMO	IAEA
Pilot projects					
- Pilot project on monitoring of Tl, Be, Co, Tl, Sb, Ag, Mo, V and U	30,000*	-	-	-	-
- Assessment of airborne pollution in the Mediterranean Sea	-	-	-	15,000	-
- Assessment of the state of pollution of the Mediterranean Sea by Tl, Be, Co, Tl, Sb, Ag, Mo, V and U	5,000*	-	-	-	-
- Assessment of the state of pollution of the Mediterranean Sea by herbicides and fungicides	5,000	-	-	-	-
- Assistance to institutions participating in research programmes, through provision of research grants (about 70 grants to about 60 institutions)	65,000	55,000	29,000	14,000	17,000

* These activities will be implemented only if unused MED POL funds are available.

Annex IV

Coastal Zone Management

C. Coastal Zones Pilot Projects

Short-term Objectives:

To integrate environmental and resource management policies in coastal zones proposed and accepted by the Contracting Parties.

Achievement Indicators:

Number of coastal zone programmes adopted by the Contracting Parties.

Workplan	Timetable	Responsibility
Preparation of documents and implementation of activities forming a part of the coastal zones programme and preparatory activities for the follow-up	Continuous 1992	UNEP/MEDU PAP/RAC, BP/RAC ROCC/IMO SPA/RAC FAO, WHO
Assistance to institutions participating in coastal zone programme	Continuous 1992	UNEP/MEDU PAP/RAC, FAO, WHO, BP/RAC,
Study the impact of climate change on Mediterranean coastal zone	Continuous 1992	UNEP/MEDU
Consultation meetings relevant to each programme coastal zone	Continuous 1992	UNEP/MEDU, PAP/RAC

Outputs:

- Reports of the consultants on the implementation of coastal zones programme and preparatory activities for follow-up action to be disseminated to national and local authorities, Mediterranean institutes, MAP focal points and international organizations.
- About ten Mediterranean institutes financially assisted in their participation in coastal zone programme.
- Reports of the studies on the impact of climate change on the Mediterranean coastal zone.
- Reports of the consultation meetings to be held in 1992 on the ongoing coastal zone programme to be distributed to national and local authorities, MAP focal points, international organizations and Mediterranean institutions.

Use of outputs

- Reports will allow Contracting Parties to analyze the implementation of coastal zone programme.

- About ten national institutes will be able to participate in coastal zone programme.

1992 Budget as approved by the Contracting Parties (in US dollars)

	MTF
- Consultants to assist in preparation and implementation of documents and activities resulting in the implementation of coastal areas management programme and preparatory activities for follow-up	170,000
- Assistance to institutions participating in coastal areas management programme approved by the Contracting Parties (Sub-contracts)	245,000
- Consultation meetings relevant to each coastal area	60,000
- Study of the impact of climate change on Mediterranean coastal zone (Sub-contracts)	40,000
TOTAL	515,000

1992 Budget as approved by the Contracting Parties (in US dollars)

	MTF
WHO under Sub-contract 2106	
- Assistance to institutions participating in coastal zone pilot projects approved by the Contracting Parties and preparation of relevant documentation	20,000
FAO under Sub-contract 2103	
- Assistance to institutions participating in coastal zone pilot projects approved by the Contracting Parties and preparation of relevant documentation	20,000