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MEDITERRANEAN ACTION PLAN

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

Athens, 9-12 January 1989

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

UNEP
Athens, 1989

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The XXII IAAC Meeting was held in Athens, 9-12 January 1989. The list of participants appears as annex I.

Agenda item 1. Opening of the meeting

Mr. A. Manos, Coordinator of the MAP Coordinating Unit, welcomed the participants to the Coordinating Unit. He referred to the current refocusing of MAP, which would require adjustments within MED POL as well. Some may be required in order to strengthen the secretariat capability for coastal zone management and others may reflect the changing needs and experience accumulated since the start of Phase II in 1981. The process of self-evaluation of MED POL was already in progress and would be completed before 1990 when the Phase II would come to an end.

Mr. Manos underlined the value of the close cooperation among the participating Agencies that was all the more necessary when their joint assessments and recommendations must serve as a basis for costly investment on the part of governments in the LBS implementation.

Mr. L. Jeftic stressed that the MED POL activities were being implemented as the joint coordinated effort of UNEP, FAO, WHO, IOC, UNESCO, WMO and IAEA and that refocusing of MED POL started already two years before with the introduction of LBS implementation and data quality assurance and readjustment of monitoring and research.

Mr. L. Jeftic acted as chairman and Mr. F.S. Civili as secretary of the meeting.

The agenda adopted by the meeting appears as annex II.

Agenda item 2. Review of 1988-1989 activities

Mr. F.S. Civili briefly introduced the working document made available to the meeting (UNEP(OCA)/MED WG. 7/2) explaining that it contained a number of annexes covering the activities carried out in 1988 as well as those planned for 1989 which needed to be reviewed and amended, as appropriate.

Agenda item 2.1. Monitoring

The status of the 1988 monitoring agreements was reviewed, including signatures of the agreements, contributions granted and the data received (annex III). In discussing the plans for the preparation of 1989 programmes, the Committee agreed that the letter/reminder concerning the new programmes to be proposed, should be sent out at the beginning of the year and that it should contain a paragraph reminding the National Coordinators that the only source of financial assistance to countries for the purchase of instruments was through National monitoring programmes agreements. Therefore, a country in possession of an old and obsolete instrument had to decide whether it was ready to utilise funds for its replacement or for new instrument of a different type. The letter/reminder should also urge the introduction of the airborne component into the national monitoring agreements and should be followed by a letter sent to all National Coordinators by WMO containing all the necessary technical details for the launching of the programme.

Agenda item 2.2 Pilot monitoring exercises

The progress achieved in the implementation of the pilot surveys on organotins and organophosphorus compounds were reviewed by the Committee. The two surveys had been completed and the evaluation of the results for the organotin was made during a meeting held in Erdemli, 7-9 Nov. 1988 and the evaluation for the organophosphorus was planned to be made at a meeting to be held in Barcelona, 24-26 Jan. 1989.

The survey on persistent synthetic materials would instead continue in 1989. Data had started coming in and their evaluation was under way.

Agenda item 2.3 Data collection, processing, analysis and presentation

The current status and urgent priorities of the MED POL database, which covered monitoring agreements, microbial, heavy metals and chlorinated hydrocarbons data was presented by Mr. A. Aksel. The participants were also informed on the current activities regarding data manipulation, query, analysis and presentation as well as the acquisition of the new advanced tools. Future orientation of the data processing was discussed. Data entry for heavy metals and chlorinated hydrocarbons would be completed by the end of January 1989, and petroleum hydrocarbons by the end of February 1989.

The difficulty of data entry based on the current reporting forms was noted and a decision was made to conduct working sessions of the agencies in conjunction with the Unit's computer operations officer regarding design of the new reporting forms.

Agenda item 2.4 Reporting forms

The status of the preparation of reporting forms for monitoring data was reviewed and a summary table with deadlines for their completion is presented in annex IV.

Agenda item 2.5 Data Quality assurance and intercalibration

The representative of IAEA informed the Group of on-going and proposed intercalibration exercises. During 1988 two major exercises were initiated, designed to intercalibrate samples at background levels of contaminants: (1) Mediterranean deep sea sediments and (2) Mediterranean tuna fish. Samples were distributed in both cases, for trace metals and chlorinated hydrocarbons, to all MED POL monitoring laboratories, to other Regional Seas areas and to additional experienced "benchmark" laboratories.

In 1989 the programme would include the distribution of sediment and bivalve samples from a Mediterranean hot spot. Samples from suitable locations were presently being tested.

In order to improve the availability of suitable Reference Materials in the region, a collection of Reference Materials and standards was being formed at the Monaco laboratory. This now included materials from NBS (USA), NRC (Canada), NIES (Japan) and the EPA (USA) as well as the Reference Materials from IAEA and commercially available standards.

The data quality assurance programme for 1988 focussed on improving data quality on chlorinated hydrocarbons in monitoring laboratories in Egypt, Algeria and Morocco. Activities completed included the training of 18 Scientists at the Monaco laboratory, the completion of 4 extensive expert joint monitoring missions to the laboratories involved and one training cruise on a Moroccan research vessel.

Agenda item 2.6 LBS implementation

The calendar for the implementation of the LBS protocol in the period 1986-1989 was reviewed by the Committee (annex V). It was also agreed that for all subjects to be tackled as from 1990, the responsible organizations should start identifying experts whose task would be to pinpoint existing gaps which could be covered by the research component of MED POL. The ad hoc meeting on monitoring in 1989 should also cover the subject.

Agenda item 2.7 Research

The new research proposals for 1989 were reviewed by the Committee and a full list of accepted and rejected projects appears as annex VI. The FAO representative requested that projects to be processed and followed up by his organization should be transmitted formally by the MED Unit with a covering letter or memo. He also stressed the importance of having the forms developed during the IAAC XXI (1988) fully used by principal investigators who propose new projects.

The Group was informed of the approval of project 5102-81-01 for 1989 and, as a result, the funds for research (line 2101) were distributed as follows: FAO: US\$ 98,000 ; WHO: US\$ 98,000 ; IOC: US\$ 38,000 ; IAEA: US\$ 30,000 ; WMO: US\$ 21,000.

Agenda item 2.8 Meetings

The list of meetings held in 1988 (dates, venue, responsible agency and number of participants) and those to be organized in 1989 were amended as appropriate by the Group (see annex VII)

Agenda item 2.9 MAP Technical report series

The Group took note of the list of MAP Technical report series which had been published by the MED Unit and agreed on a list of new issues to be prepared starting as of 1989 (annex VIII).

Agenda item 2.10 Recommendations of Scientific and Technical Committee

The recommendations of the I Scientific and Technical Committee meeting related to MED POL were reviewed by the Group.

Agenda item 3. II Meeting of the Scientific and Technical Committee

The preparation of the II Meeting of the Scientific and Technical Committee (29 May - 3 June 89) was discussed. The Group agreed on an agenda (annex IX) and on the main documents to be presented. They included: Assessment of pollution by used lubricating oils, assessment of pollution by organotin compounds, assessment of pollution by organohalogen compounds, assessment of pollution by cadmium. All assessments would contain proposed measures, while the assessment of pollution by organophosphorus compounds would be presented as prepared by the consultant and as an information document. It was agreed that the final texts in English should reach the Med Unit by the end of February.

Also, it was agreed that contributions for the main document on progress and programme for 1990/1991 would be sent by agencies by the end of February, using the same outline utilised for the progress report presented to the STC in 1988 (UNEP(OCA)/MED WG. 1/3).

Agenda item 4. Meeting on Eutrophication

The background and the philosophy behind the Meeting on Eutrophication (planned to be held in Athens, 8-10 March 1989) was discussed by the Group. The title of the meeting was agreed as "UNEP/FAO/IOC/WHO Meeting on implication and control of undesirable plankton blooms". The Committee agreed on the agenda for the meeting (annex X) and on a provisional list of experts to be invited (thirteen mediterranean and three from other regions). It was also agreed that the conclusions and recommendations of the meeting would be transmitted to the II Meeting of the Scientific and Technical Committee.

Mr. L. Mee, reference methods coordinator, informed the meeting that a reference method entitled "Guidelines for detecting and monitoring eutrophication in the marine environment", was envisaged but could only be prepared if MED POL was willing to sponsor it. It was agreed that such a document could make a useful contribution to the MED POL programme.

Agenda item 5. Meeting on Monitoring

The preparation of the meeting of responsible investigators of monitoring programmes (Athens, 20-24 March 1989) was discussed and the agenda was finalised (annex XI). It was agreed that in addition to the three data evaluation documents prepared by the consultants (R. Fukai, J. Albaiges and R. Mujeriego) a position document would be presented to the meeting. These three consultants will be invited to participate in the meeting. The structure and the content of the document were agreed. The list of contents is presented as annex XII.

It was agreed that contributions from agencies for the position document had to reach the MED Unit by 20 Jan. 1989.

Agenda item 6. Proposals for 1990-1991 biennium

Agenda item 6.1 Monitoring

A lengthy discussion was held on the refocusing and the new approach to be followed by the MED Unit and the Cooperating Agencies in the implementation of the monitoring activities in the biennium 1990-1991.

The Group reiterated that national monitoring programmes should be designed to produce a statistically significant number of reliable and useful data. In examining the programme proposed by each country, modifications may be suggested taking into account, as much as possible, known local sources of pollution, use of the monitored areas and the actual local capabilities.

With this concept in mind, various ideas were proposed in order to ensure a more comprehensive data base for achieving the various objectives of MED POL Phase II, particularly the one concerning the periodic assessment of the state of pollution of the Mediterranean Sea. One approach put forward was the establishment, together with the national authorities, of a minimum network of stations (away from hot spots) which could be sampled in a systematic and coordinated manner, backed-up by a split-sample quality assurance programme. Criteria for selecting or grouping the stations were also discussed.

Within the limit of the existing travel budget, country visits and personal contacts were unanimously considered as a fundamental tool to achieve the above objectives and should be made regularly by the staff involved. A more active role of agencies in the design and implementation of national monitoring programmes was considered essential.

Agenda item 6.2 Pilot monitoring exercises

In planning the pilot monitoring surveys for the period 1990-1991, the Group agreed that the launching of three new pilot monitoring exercises should be proposed to the Contracting Parties. The substances to be covered by the surveys were agreed to be :

- a) Non-biodegradable detergents and other surface-active substances;
- b) Selected elements from item 1 of annex II of LBS protocol;
- c) Herbicides and fungicides.

Agenda item 6.3 Data collection, processing, analysis and presentation

The line of work being followed by the MED Unit during the biennium 1988-1989 was considered the basis for the work to be carried out in 1990-1991. Two small ad hoc meetings on the data processing to be held respectively in 1990 and 1991 were considered essential for a proper coordination and verification of the activities.

Agenda item 6.4 Data quality assurance and intercalibration

The Group agreed that also for the biennium 1990-1991 priority had to be given to all the activities related to the improvement of the quality of monitoring data. The implementation of the Data Quality Assurance Programme as well as intercalibration exercises should continue and possibly be expanded according to the availability of funds. Considering that the Data Quality Assurance Programme still represented a new approach in MED POL, the usefulness of a meeting of participants in the programme as well as secretariat staff to be held in 1991 was stressed by the Group.

Agenda item 6.5 LBS implementation

The calendar of activities related to the implementation of the LBS protocol for the biennium 1990-1991 was reviewed by the Committee and it appears in annex V.

Agenda item 6.6 Research

The need for revising the objectives of the research component of MED POL in order to bring it closer to the needs of the LBS and Dumping protocols was unanimously felt by the Group. It was therefore agreed that in substitution of the twelve research areas (A-L), starting from 1990 a new framework of activities should be proposed to Contracting Parties. The new umbrella structure of the component should be taken directly from the long-term objectives of the implementation of the LBS and Dumping protocols under which, tentatively every three years and as appropriate, short-term objectives should be identified (e.g. specific substances or processes) according to the calendar of the agreed LBS activities or existing gap. Proposal of the new structure of the research component is given as annex XIII to this report.

Agenda item 6.7 Meetings

Under this agenda item the Group prepared a list of meetings proposed to be held during the biennium 1990-1991 (annex XIV). Terms of reference for each meetings should be prepared by the relevant Agency by 20 of Jan. 89.

Agenda item 6.8 MED POL Budget for 1990-1991

The proposed budget for the MED POL activities for the biennium 1990-1991 as agreed by the Committee, appears as annex XV.

Agenda item 6.9 MAP Technical Reports Series

The Group agreed that the preparation and publication of new issues of the MAP Technical Report Series should continue in 1990-1991 according to the subjects specified in annex VIII. Additional subjects, as appropriate, could also be taken into consideration as they become available through the implementation of the MED POL activities.

Agenda item 7. Revision and closing of project 5102-81-01

The Group discussed the need for an early revision of the project as funds had become available. A discussion was also held on the request by UNEP to propose a new project by March 1989 and to close 5102-81-01 accordingly. Specific queries on the administrative procedures to follow for the closing of the project should be formulated as soon as possible by the Agencies to the MED Unit who would refer them to the appropriate Units in Nairobi.

Agenda item 8. Refocusing of MAP

A discussion was held on the implication that the refocusing of the entire Mediterranean Action Plan would have on MED POL. The Group felt that the reorientation of the monitoring and research components had been taken into account and, as a result, the activities proposed for the biennium 1990-1991 already reflected the new objectives of MED POL which had to bring its components closer to the implementation of the LBS protocol.

Agenda item 9. Other business

The representative of IAEA informed the Group of the third International Workshop on organotin which may take place towards the end of 1989, in Monaco. The meeting was the "European" follow-up to the previous similar meetings which had taken place in 1987 and 1988 in Canada and U.S.A. He also informed that ICSEM, Monaco, offered to act as secretariat to the Meeting. He suggested that a co-sponsoring by the agencies involved in MED POL and UNEP should be explored considering the involvement of the MED POL programme in the subject.

Agenda item 10. Adoption of the report

The report of the XXII Inter-Agency Advisory Committee (IAAC) for MED POL was unanimously adopted by the participants.

Agenda item 11. Closure of the meeting

The meeting was closed by Mr. L. Jeftic at 18.00 hours 12 January 1989.

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: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL
ORGANIZATION

Mr Svend K. Jensen
Scientific Officer
UNESCO/IOC
7 Place de Fontenoy
75700 Paris
France

Tel: 45683992
Tlx: 204461 PARIS
Cable: UNESCO PARIS
Fax: 45671690

WORLD HEALTH ORGANIZATION

Mr Louis J. Saliba
Senior Scientist
WHO/EURO Project Office
Co-ordinating Unit for the Mediterranean
Action Plan
Leoforos Vassileos Konstantinou 48
P.O. Box 18019
11610 Athens
Greece

Tel: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

WORLD METEOROLOGICAL
ORGANIZATION

Mr Alexandre Soudine
Scientific Officer
World Meteorological Organization
41 Avenue Giuseppe Motta
1211 Geneva 20
Switzerland

Tel: 346400 (ext. 4-20)
Tlx: 23260 OMM CH
Cable: METEOMOND GENEVA
Fax: 342326

INTERNATIONAL ATOMIC
ENERGY AGENCY

Mr Laurence D. Mee
Head
Marine Environmental Studies Laboratory
International Laboratory of Marine

Radioactivity

International Atomic Energy Agency
Musée Océanographique
98000 Monaco

Tel: (93) 301514
Tlx: 479378 ILMR MC
Fax: 93257346

INTERGOVERNMENTAL
OCEANOGRAPHIC COMMISSION

Mr Svend K. Jensen
Scientific Officer
UNESCO/IOC
7 Place de Fontenoy
75700 Paris
France

Tel: 45683992
Tlx: 204461 PARIS
Cable: UNESCO PARIS
Fax: 45671690

UNITED NATIONS
ENVIRONMENT PROGRAMME

Mr Adnan Aksel
Computer Operations Officer
Co-ordinating Unit for the Mediterranean
Action Plan
Leoforos Vassileos Konstantinou 48
P.O. Box 18019
11610 Athens, Greece

Tel: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

Mr F. Saverio Civili
Marine Scientist
Co-ordinating Unit for the Mediterranean
Action Plan
Leoforos Vassileos Konstantinou 48
P.O. Box 18019
11610 Athens, Greece

Tel: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

Mr Ljubomir Jeftic
Senior Marine Scientist
Co-ordinating Unit for the Mediterranean
Action Plan
Leoforos Vassileos Konstantinou 48
P.O. Box 18019
11610 Athens, Greece

Tel: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

Mr Aldo Manos
Co-ordinator
Co-ordinating Unit for the Mediterranean
Action Plan
Leoforos Vassileos Konstantinou 48
P.O. Box 18019
11610 Athens, Greece

Tel: 7236586, 7244536
Tlx: 222611 MEDU
Cable: UNITERRA ATHENS
Fax: 7218246

Annex II

Agenda

1. Opening of the Meeting
2. Review of 1988-1989 activities
 2. 1. Monitoring
 2. 2. Pilot monitoring exercises
 2. 3. Data collection, processing, analysis and presentation
 2. 4. Reporting Forms
 2. 5. Data quality assurance and intercalibration
 2. 6. LBS implementation
 2. 7. Research
 2. 8. Meetings
 2. 9. MAP Technical Reports Series
 - 2.10. Recommendations of the Scientific and Technical Committee
3. II Meeting of the Scient. and Tech. Committee (29 May - 3 June 89)
4. Meeting on Eutrophication (8-10 March 1989)
5. Meeting on Monitoring (20-24 March 1989)
6. Proposals for 1990-1991 activities
 6. 1. Monitoring
 6. 2. Pilot Monitoring exercises
 6. 3. Data collection, processing, analysis and presentation
 6. 4. Data quality assurance and intercalibration
 6. 5. LBS implementation
 6. 6. Research
 6. 7. Meetings
 6. 8. MED POL Budget for 1990-1991
 6. 9. MAP Technical Reports Series
7. Revision and closing of project 5102-81-01
8. Refocusing of MAP
9. Other business
10. Adoption of Report
11. Closure of Meeting

Annex III

Status of National Monitoring Agreements
1988

Country	Status	Contribution	Data sent
Algeria	sent for signature	US\$ 40,000	85,86,87
Cyprus	signed	US\$ 25,000	83,84,85,86,87
Egypt	-	-	-
France	-	-	83,84,86
Greece	signed	US\$ 60,000	-
Israel	signed	US\$ 38,000	82,83,84,85,86, 87
Italy	-	-	87
Lebanon	signed	US\$ 40,000	85,86,87
Libya	-	-	-
Malta	signed	US\$ 20,000	82,83,84,85,86, 87
Monaco	-	-	(see France)
Morocco	being prepared	US\$ 25,000	83,84,85,86,87
Spain	sent for corrections	-	81,82,83,84,85
Syria	signed	US\$ 40,000	86,87
Tunisia	-	-	-
Turkey	-	-	-
Yugoslavia	signed	US\$ 50,000 (60,000)	83,84,85,86,87

Annex IV

Status of preparation of data reporting forms

Parameter	Matrix	Scheduled to be ready by: (IAAC XXI)	Presented to Sc.Tec. Committee	Responsible	Ready by: (IAAC XXII)
Heavy metals	Effluents	June 88		WHO	15 Feb. 89
Chlorinated hydrocarbons	Effluents	June 88		WHO	15 Feb. 89
Nutrients	Effluents	June 88		WHO	15 Feb. 89
Heavy metals	Sediments	April 88	X	IAEA	
Chlorinated hydrocarbons	Sediments	April 88	X	IAEA	
Heavy metals	Sea-water	April 88		IOC/ICES	Sept. 89
Microbial contaminants	Sea-water	Feb. 88		WHO	End of Jan.
Petroleum hydrocarbons	Sediments	April 88		IOC/IAEA	March 89
Petroleum hydrocarbons	Sea-water	Feb. 88	X	IOC	
Pelagic tar	Sea-water	Feb. 88	X	IOC	
Oil slicks	Sea-water	Feb. 88	X	IOC	
Tar on beaches	-	Feb. 88	X	IOC	
Petroleum hydrocarbons	Organisms	-		IOC/IAEA	Sept. 89
Standard physical and chemical parameters	-	-		IOC/IAEA	Sept. 89
Airborne pollution	-	-		WMO	April 89

ANNEX V

IMPLEMENTATION OF THE LAND-BASED SOURCES PROTOCOL DURING 1986-1987

Actions	Relevance to the Protocol	Responsible Agencies	Target Date (as adopted by C.P.)	Present Status
1. Completion and Revision of the Glossary.	Protocol and Annexes	UNEP/MEDU, WHO	Dec. 1986	Prepared
2. 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
3. List of substances falling within each of the Groups in Annex II to the Protocol.	Annex II	UNEP/MEDU, IRPTC, IAEA	Dec. 1986	Continuously covered in the assessments
4. 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	Prepared and presented at V WGSTC. Being revised for STC 89
5. Survey of land-based sources and amounts of pollutants reaching the Mediterranean Sea.	Articles 5 & 6; Annexes I and II	UNEP/MEDU, WHO	Dec. 1986	Questionnaire ready. Sent to N.C. in Dec.88
6. 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
7. An evaluation of the benefits and 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	Study covering also 14 and 5 of 88-89 workplan to be ready by Dec.89
8. 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 in preparation. Other aspects ongoing
9. Draft guidelines for the issue of authorization for the discharge of liquid wastes into the Mediterranean.	Article 6	UNEP/MEDU, WHO	Dec. 1987	Document being prepared to be presented at expert meeting in Sept.89

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Present Status
10. 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. Revised doc. to be presented at STC 89
11. 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	To be presented at STC 89
12. 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 UNEP/WG.160/8 MAP TECH.REP.18
13. 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	Linked to 15. Doc. in preparation to be presented at expert meeting Sept. 89
14. 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.	Article 7, para. 1(a)	UNEP/MEDU, WHO	Dec. 1987	See 7
15. Identification and categorization 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	Linked to 13. Ready by February 1989

Complete calendar of LBS implementation : 1988-1995

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

Actions	Relevance to the Protocol	Responsible Agencies	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, UNIDO	Dec. 1988	Doc. to be prepared in Sept.89, to be presented at STC 90
2. Assessment of the state of pollution in the Mediterranean Sea by organo-phosphorus compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1988	Done. Draft Doc. to be presented at STC 89
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 Doc. to be presented at STC 89
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, IRPTC, FAO, WHO	Dec. 1988	Continuously covered in the assessments
5. Evaluation of <u>in situ</u> investigations on selected submarine outfalls to determine their technical efficiency and cost-effectiveness	Article 7, para 1(a)	UNEP/MEDU, WHO	Dec. 1988	Study linked to 7 and 14 of 86-87 workplan
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 (US\$ 10,000 from line 2103 of 81-01)
7. Preparation of draft Annex IV to the Protocol concerning pollution from land-based sources transported by the atmosphere	Article 4	UNEP/MEDU, WHO	Dec. 1988	To be prepared by a consultant on the basis of ad hoc meeting held Dec. 88 (US\$ 7,500 from 1211 of 84-04)
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	Consultant to be hired. Doc.to be prepared by end 89 89: US\$ 5,000

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Present Status
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	Meeting held in June 88. Doc. to be prepared by February 90
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	Ministries of Health contacted. Doc. to be prepared by Feb. 90. Consult. in 90. US\$ 5,000
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	Consultant to be hired in 89 (already budgeted from 2102 of 81-01)
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 89 (or 90) US\$ 5,000
13. Assessment of the state of pollution in the Mediterranean Sea by zinc, copper and lead with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1990	Consult. in 89 (or 90) US\$ 5,000
14. Assessment of the present state of pollution in the Mediterranean Sea by nickel, chromium, selenium and arsenic with proposed measures	Article 6, Annex II	UNEP/MEDU, FAO	Dec. 1990	Consult. in 89 (or 90) US\$ 5,000
15. 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	Follow-up to 11 of 88-89 Consult. in 90. US\$ 5,000
16. 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, IOC	Dec. 1991	Meeting in March 89. See 24. Consult. in 89. US\$ 3,000

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Present Status
17. Assessment of the present 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 90. US\$ 5,000
18. 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 89. US\$ 3,000
19. 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	Consult. in 90. US\$ 5,000 Consult. in 91. US\$ 5,000
20. 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	Consult. in 90. US\$ 5,000 Consult. in 91. US\$ 5,000
21. Formulation of draft common guidelines, standards and criteria for special requirements for effluents necessitating separate treatment	Article 7, para 1(b)	UNEP/MEDU, WHO, UNIDO	Dec. 1991	Consult. in 90. US\$ 5,000 Consult. in 91. US\$ 5,000
Survey on the yield and the cost/benefit of the application of alternative products and processes	Article 7, para 1(d)	UNEP/MEDU, WHO, UNIDO	Dec. 1991	
23. 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, IOC	Dec. 1992	

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Present Status
24. Assessment of the present state of 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, IOC	Dec. 1992	Meeting in March 89. See 16.
25. Assessment of the present state of pollution in the Mediterranean Sea by barium, uranium and cobalt with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1992	Consult. in 89. US\$ 2,000 Consult. in 90. US\$ 2,000 also for 29, 32, 33
26. 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	
27. 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 use of the sea owing to the quantities in which they are discharged and proposed measures	Article 6; Annex II	UNEP/MEDU, IOC	Dec. 1993	
28. 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	Item deleted from annex of LBS Protocol
29. Assessment of the present state of pollution in the Mediterranean Sea by antimony, tin and vanadium with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	See 25.

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Present Status
30. Assessment of the present state of pollution in the Mediterranean Sea by substances which have a deleterious 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	
31. Assessment of the present state of pollution in the Mediterranean Sea by biocides and their derivatives not covered in Annex I and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	
32. Assessment of the present state of pollution in the Mediterranean Sea by titanium, boron and silver and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994	See 25.
33. Assessment of the present state of pollution in the Mediterranean Sea by molybdenum, beryllium, thallium and tellurium with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1995	See 25.

Annex VI

List of research projects proposed for 1989

- a) proposals accepted for analysis
- b) rejected proposals

RESEARCH PROPOSALS
1989

FAO

M A P

FAO CYP- 3-I A. DEMETROPOULOS FISHERIES DEPARTMENT, MINISTRY OF AGRICULTURE, NICOSIA	82: 83: MAGNI 84: 85: 86: 87: 88:	89:UND
RESEARCH ON POLLUTION INPUT, DISPERSION OF POLLUTANTS, AND THEIR EFFECTS ON THE MARINE LIFE IN THE VASSILIKO AREA.		
FAO EGY- 20-G F. T. TAIL INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: IOPAL 84: 85: 86: 87: 88:	89:UND
EFFECT OF POLLUTION BY HYDROGEN SULFIDES ON THE HYDROBIONS IN BOTH ABU QIR BAY AND WESTERN HARBOUR		
FAO FRA- 48-G M. ROMEO I.N.S.E.R.M., UNITE 303 "MER ET SANTE", VILLEFRANCHE-SUR-MER	82: 83: INSEM 84: 85: 86: 87: 88:	89:UND
ETUDE DES EFFETS TOXIQUES ET PROTECTEURS DU SELENIUM CHEZ DES ALGUES MARINES		
FAO FRA- 45-H A. KOMZIKOFF STATION ZOOLOGIQUE, UNIVERSITE PIERRE ET MARIE CURIE, VILLEFRANCHE-SUR-MER	82: 83: UCUSZ 84: 85: 86: 87: 88:	89:UND
COMPOSITION BIOCHIMIQUE ET CHARGE ENERGETIQUE ADENYLIQUE (AEC) DU PHYTOPLANCTON. RELATIONS AVEC LE DEVELOPPEMENT DES HERBIVORES PLANCTONIQUES		
FAO GRE- 63-G E. PAPATHANASSIOU NATIONAL CENTRE FOR MARINE RESEARCH, ATHENS	82: 83: NCMRA 84: 85: 86: 87: 88:	89:UND
IN SITU TOXICITY OF DISPERSANTS. CONTROLLED ENVIRONMENTAL POLLUTION EXPERIMENTS.		
FAO GRE- 64-G E. PAPATHANASSIOU NATIONAL CENTRE FOR MARINE RESEARCH, ATHENS	82: 83: NCMRA 84: 85: 86: 87: 88:	89:UND
THE USE OF OIL DISPERSANTS IN THE GULFS OF SARONIKOS, THERMAIKOS, PAGASITIKOS AND THE AREA OF KAVALA-THASOS		
FAO GRE- 70-G G. VERRIPOPOULOS ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS	82: 83: UATZO 84: 85: 86: 87: 88:	89:UND
STUDY OF THE PHYSIOLOGY OF THE PLANKTONIC COPEPOD ACARTIA CLAUDI UNDER THE EFFECT OF LETHAL AND SUBLETHAL CONCENTRATIONS OF COBALT.		
FAO GRE- 65-H K. PAGOY NATIONAL CENTRE FOR MARINE RESEARCH, ATHENS	82: 83: NCMRA 84: 85: 86: 87: 88:	89:UND
POLLUTION EFFECTS ON PLANKTON COMPOSITION AND SPATIAL DISTRIBUTION, NEAR THE SEWAGE OUTFALL OF ATHENS (SARONIKOS GULF).		

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$
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FAO GRE-68-H M. KARYDIS DEPARTMENT OF ENVIRONMENT, UNIVERSITY OF THE AEGEAN, KOS	82: 83: UAGDE 84: 85: 86: 87: 88:	89:UND
EUTROPHICATION ASSESSMENT BASED ON MULTIVARIATE PROCEDURES: CRITERIA DEVELOPMENT FOR THE MANAGEMENT OF COASTAL WATERS		
FAO GRE-67-K E. STEPHANOU INSTITUTE OF MARINE BIOLOGY, IRAKLIO, CRETE	82: 83: IMBIC 84: 85: 86: 87: 88:	89:UND
ORGANOTIN COMPOUNDS IN THE MEDITERRANEAN ENVIRONMENT : FATE & DETERMINATION.		
FAO ISR-34-G Y. ACHITUV DEPT. OF LIFE SCIENCES, BAR-ILAN UNIVERSITY, RAMAT-GAN	82: 83: UBIRG 84: 85: 86: 87: 88:	89:UND
BIOACCUMULATION AND ULTRASTRUCTURE CHANGES IN DONAX TRUNCULUS EXPOSED TO HEAVY METALS IONS		
FAO ITA-118-H S. FONDA UMANT LABORATORY OF MARINE BIOLOGY - CINAM, TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 88:	89:UND
PERIODICITY OF THE MICRO-PLANKTON BLOOMS IN EUTROPHICATED AREAS IN THE GULF OF TRIESTE (NORTH ADRIATIC SEA)		
FAO ITA-119-H E. GHIRARDELLI LABORATORY OF MARINE BIOLOGY - CINAM, TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 88:	89:UND
MONITORAGE BIOLOGIQUE DES EAUX DU GOLFE DE TRIESTE (ADRIATIQUE SEPTENTRIONAL); PRODUCTION SECONDAIRE PLANCTONIQUE		
FAO ITA-120-H L. ROTTINI SANDRINI LABORATORY OF MARINE BIOLOGY - CINAM, TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 88:	89:UND
MONITORAGE ET ELABORATION DE DONNEES DE MACROPLANKTON GELATINEUX DANS LE GOLFE DE TRIESTE (ADRIATIQUE SEPTENTRIONAL)		
FAO ITA-117-I M. SARA ISTITUTO DI ZOOLOGIA, UNIVERSITA DI GENOVA, GENOVA	82: 83: UGEZO 84: 85: 86: 87: 88:	89:UND
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)		
FAO LEB-5-H M. ABOUD-ABI SAAB MARINE RESEARCH CENTRE, BEIRUT	82: 83: MRCBE 84: 85: 86: 87: 88:	89:UND
INFLUENCE DES RIVIERES SAISONNIERES SUR LA DYNAMIQUE DES POPULATIONS PLANCTONIQUES (PRODUCTION LAIRE.) - CAS TYPIQUE DE LA COTE CENTRALE DU LIBAN		

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FAO YUG- 89-G J. PAVICIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 85: 86: 87: 88:	89:UND
FIELD EVALUATION OF METAL-BINDING PROTEINS OF MYTILUS GALLOPROVINCIALIS IN ASSESSING TRACE METAL POLLUTION OF MARINE ENVIRONMENT		
FAO YUG- 94-G M. OZRETIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: 85: 86: 87: 88:	89:UND
OCCURENCE OF ARSENIC AND CADMIUM IN MARINE ORGANISMS FROM VARIOUS NORTHERN ADRIATIC SITES AND THEIR TOXICITY		
FAO YUG- 95-G C. LUCU CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: 85: 86: 87: 88:	89:UND
IMPAIRMENT OF PHYSIOLOGICAL PROCESSES IN MARINE ORGANISMS INDUCED BY TOXIC METALS		
FAO YUG- 96-G M. DEVESCOVI CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: 85: 86: 87: 88:	89:UND
BASE-LINE STUDIES OF CADMIUM, COPPER AND LEAD CONCENTRATIONS IN SELECTED NORTHERN ADRIATIC BENTHIC ORGANISMS		
FAO YUG- 92-H N. ZAVODNIK CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: 85: 86: 87: 88:	89:UND
A CENTURY OF ALTERATIONS IN NORTHERN ADRIATIC SHALLOW WATER COMMUNITIES		
FAO YUG- 93-H D. ZAVODNIK CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: 85: 86: 87: 88:	89:UND
PHYTOPLANKTON BLOOM CONSEQUENCES ON BENTHIC ORGANISMS		

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IAEA

M A P

IAEA EGY- 21-A M. M. SHRIADAH INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: IOPAL 84: 85: 86: 87: 88:	89:UND
DEVELOPMENT OF A NEW METHODS FOR THE DETERMINATION OF TRACE METALS FOR MONITORING OF MARINE POLLUTANTS		
IAEA FRA- 49-K P. GARRIGUES (NOT ENDORSED) UNIVERSITE DE BORDEAUX, GROUPE D'OCEANOGRAPHIE PHYSICO-CHEMIQUE, TALENCE	82: 83: UBOPT 84: 85: 86: 87: 88:	89:UND
LES HYDROCARBURES AROMATIQUES POLYCYCLIQUES DANS L'ENVIRONNEMENT MARIN COTIER : ASPECTS PHYSICO-CHEMIQUES ET BIOCHIMIQUES		
IAEA GRE- 71-A E. STEPHANOU INSTITUTE OF MARINE BIOLOGY, IRAKLIO, CRETE	82: 83: IMBIC 84: 85: 86: 87: 88:	89:UND
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		
IAEA TUR- 21-A B. HENDEN FACULTY OF SCIENCE, EGE UNIVERSITY, IZMIR	82: 83: URGFS 84: 85: 86: 87: 88:	89:UND
LONG TERM CONTROL OF TIN POLLUTION OF THE SEAWATER IN ALIAGA, ISMIR		
IAEA YUG- 90-A B. RASPOR CENTRE FOR MARINE RESEAPCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 85: 86: 87: 88:	89:UND
DEVELOPMENT OF NEW METHOD FOR THE ESTIMATION OF SEAWATER POLLUTION WITH TRACE METALS		

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IOC

M A P

IOC EGY- 18-F A. M. KARAM INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: IOFAL 84: 85: 86: 87: 88:	89:UND
INVESTIGATION OF THE SURFACE CURRENT REGIME AND THE VERTICAL FINESTRUCTURE IN ABU QIR BAY		
IOC EGY- 19-F I. A. MAIYZA INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: IOFAL 84: 85: 86: 87: 88:	89:UND
THE EFFECT OF OCEANOGRAPHIC AND METEOROLOGICAL FACTORS ON THE TRANSPORT OF POLLUTANTS IN THE ARAB'S GULF OF EGYPT		
IOC ITA-121-F R. SANTANGELO OSSERVATORIO GEOPISICO, UNIVERSITA DI MODENA, MODENA	82: 83: UMOOG 84: 85: 86: 87: 88:	89:UND
INCLUSION OF MICROWAVE SENSORS IN OCEAN MODELLING		
IOC YUG- 88-L J. FAGANELI INSTITUTE OF BIOLOGY, UNIVERSITY EDVARD KARDELJ, LJUBLJANA	82: 83: UKALJ 84: 85: 86: 87: 88:	89:UND
THE ROLE OF SEDIMENTATION IN THE BIOGEOCHEMICAL CYCLES OF SELECTED HEAVY METALS AND NUTRIENTS IN SHALLOW COASTAL WATERS (GULF OF TRIESTE, NORTHERN ADRIATIC)		

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WHO

M A P

WHO FRA- 46-K M. J. GAUTHIER 82: 89:UND
 INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE 83:
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WHO GRE- 69-K M. KOSTOPOULOU-KARADANELLI 82: 89:UND
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 DEPARTMENT OF PEDIATRICS, UNIVERSITY OF PADUA, PADUA 83:
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WHO ITA-123-D C. SCARPA 82: 89:UND
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 UTRCD 84:
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WHO ITA-124-D A. RENZONI 82: 89:UND
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 EVALUATION OF GENOTOXICITY OF METHYL-MERCURY BY EXAMINATION OF SISTER CHROMATID 85:
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M A P

WHO ITA-125-D R. DELLA LOGGIA ISTITUTO DI FARMACOLOGIA E FARMACOGNOSIA, UNIVERSITA DI TRIESTE, TRIESTE	82: 83: UTRPF 84: 85: 86: 87: 88:	89:UND
THE CUTANEOUS TOXICITY OF BLOOMS IN RELATION TO THEIR HEALTH HAZARD		
WHO ITA-127-G G. MELLUSO UNIVERSITY OF NAPLES, CATTEDRA DI IGIENE	82: 83: UNCIG 84: 85: 86: 87: 88:	89:UND
CHEMICAL AND MICROBIOLOGICAL EVALUATION OF POLLUTION IN WATER AND SEDIMENTS OF TWO RIVERS IN CAMPANIA REGION, ITALY		
WHO ITA-126-K L. VOLTERRA ISTITUTO SUPERIORE DI SANITA, ROMA	82: 83: ISUPR 84: 85: 86: 87: 88:	89:UND
ENTEROVIRUSES INDICATORS IN MARINE COASTAL ENVIRONMENTS		
WHO SPA- 30-K A. BOSCH NAVARRO FACULTAD DE BIOLOGIA, UNIVERSIDAD DE BARCELONA, BARCELONA	82: 83: UBAPP 84: 85: 86: 87: 88:	89:UND
THE SURVIVAL OF HUMAN ENTERIC VIRUSES IN SEAWATER		
WHO SPA- 31-K J. L. ALONSO MOLINA INSTITUTE OF HYDROLOGY AND ENVIRONMENT, POLYTECHNICAL UNIVERSITY, VALENCIA	82: 83: UVAIH 84: 85: 86: 87: 88:	89:UND
CONTROL OF NEW INTESTINAL PATHOGENS: CAMPYLOBACTER AND MOTILE AEROMONAS FROM MARINE RECREATIONAL WATERS OF VALENCIA (SPAIN)		
WHO TUR- 22-G E. ARINC DEPT. OF BIOLOGICAL SCIENCES, MIDDLE EAST TECHNICAL UNIV., ANKARA	82: 83: UMBEA 84: 85: 86: 87: 88:	89:UND
DEVELOPMENT OF AN ENZYMIC ASSAY SYSTEM FOR DETERMINATION OF BIOACTIVATION OF TOXIC ORGANIC CHEMICALS		
WHO YUG- 91-K V. PRESECKI INSTITUTE OF PUBLIC HEALTH OF SR CROATIA, ZAGREB	82: 83: TPHZA 84: 85: 86: 87: 88:	89:UND
LABORATORY PROCEDURES FOR ENTEROVIRUSES, ROTA VIRUS AND HEPATITIS A VIRUS PRESENCE DETERMINATION IN SEAWATER, SEDIMENT AND SHELFISH (MUSSEL)		

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WMO

M A P

WMO ISR- 35-L U. DAYAN
NOAA-ERL-AIR RESOURCES LABORATORY, SILVER SPRING, MD, USA

82:
83:
NEARL 84:
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89:UND

AEROSOL REMOTE SENSING OVER THE MEDITERRANEAN BASIN FROM THE NOAA SATELLITES

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REJECTED RESEARCH PROPOSALS
1989

EGYPT

- Shriadah M.M.A. Environmental studies along the coasts of Alexandria including Abu-Qir Bay, Eastern Harbour, El-Anfushy Bay and El-Mex Bay.
- El-Sarsaf W.M. Classification of stages and degree of eutrophication on the basis of quantitative parameter by using the heterotrophic potential and microbial activity (The method C-14 labelled organic matter (Amine acids-glycose labelled).
- El-Deek M. Monitoring of qualities and quantities of phenolic compounds.
- Abdelmoneim M. A. Trace Metals in Waters from S.E. Mediterranean and its lagoons.
- Emara H. I. A study on the levels of some heavy metals and petroleum hydrocarbons in water, sediments and marine organisms in some polluted areas of the Egyptian Mediterranean waters

CYPRUS

- Loizides L. Monitoring of the transport of pollutants to the sea through the atmosphere.

GREECE

- Albanis T. A. Movement of organohalogen and organophosphorus pesticid residues, from agricultural areas, in Amvrakicos and Thermaicos Gulf (Greece).

ANNEX VII

1988 - 1989 Meetings

	<u>Place</u>	<u>Date</u>	<u>Respon.</u>	No. of participants
<u>I 1988</u>				
1. Inter-Agency Advisory Committee	Athens	13-15 Jan.	MEDU	8
2. BP/MED POL consultation Meeting	Athens	23-24 Feb.	MEDU	8
3. Workshop on methodology and intercalibration of organophosphorus compounds	Monaco	13-15 Apr.	IAEA/FAO	7
4. Workshop on methodology and intercalibration of organotin compounds	Monaco	18-20 Apr.	IAEA/FAO	7
5. <u>Ad hoc</u> consultation meeting on data processing (transfer from 1987)	Athens	25-27 Apr.	MEDU	10
6. <u>Ad hoc</u> Meeting on monitoring	Monaco	28 Apr.	MEDU/IAEA	7
7. Training course and intercalibration exercise on microbiological methods	Athens	9-14 May	WHO	16
8. Scientific and Technical Committee	Athens	23-27 May	MEDU	40
9. Training workshop on the statistical treatment and interpretation of marine community data	Piran	14-24 June	FAO/IOC	29
10. Consultation Meeting on carcinogenic substances	Athens	25-27 June	WHO	7
11. <u>Ad hoc</u> Consultation Meeting on monitoring	Monaco	27-28 June	MEDU/IAEA	8
12. Consultation Meeting on health-related Mediterranean environmental quality criteria	Bled	12-16 Sept.	WHO	25

	<u>Place</u>	<u>Date</u>	<u>Respon.</u>	<u>No. of participants</u>
<u>I 1988 (cont'd)</u>				
13. Task team Meeting on implications of climatic changes in the Medit.	Split	3-8 Oct.	MEDU	20
14. MED POL Organohalogen Workshop	Monaco	24-28 Oct.	IAEA/FAO/ IOC	15
15. Consultation Meeting on acute toxicity of selected substances to marine organisms	Villefr.	10-14 Oct.	FAO	26
16. IX ICSEM/IOC/UNEP Workshop	Athens	17-19 Oct.	MEDU	30
17. Consultation Meeting on organotin substances	Erdemli	7- 9 Nov.	FAO/IAEA	7
18. <u>Ad hoc</u> Meeting for the preparation of annex IV of LBS Protocol	Athens	19-21 Dec.	WMO/MEDU	8
19. Seminar of implication of climatic changes in the Nile delta	Cairo	27-28 Dec.	MEDU	28

	Place	Date	Respon.	Estimated no. of participants
<u>II 1989</u>				
1. Inter-Agency Advisory Committee	Athens	9-13 Jan.	MEDU	8
2. Consultation Meeting on organophosphorus substances	Barcel.	24-26 Jan.	FAO/IAEA	7
3. <u>Ad hoc</u> meeting on eutrophication	Athens	8 -10 Mar.	MEDU	20
4. Meeting resp. invest. of mon. programmes	Athens	20-24 Mar.	MEDU	30
5. Consultation Meeting on solid litter	Haifa	March	IOC/FAO	7
6. Risk assessment case studies	Athens	15-19 May	IAEA/UNEP/ WHO	40
7. Review Meeting on oceanographic processes of transfer and distribution of pollutants (Activity F)	Zagreb	17-19 May	IOC	20
8. II Scientific and Technical Committee Meeting	Athens	29 May 3 June	MEDU	40
9. Intercalibration and training course on micr. pollution	Tunis	Sept.	WHO	16
10. Consultation meeting on microbial pollution	Athens	Oct.	WHO	15
11. Intercal. and methodological workshop-on organomercury	Monaco	Oct.	IAEA/WHO	10
12. <u>Ad hoc</u> consultation meeting on data processing	Athens	Nov.	MEDU	7
13. Consultation meeting on programmes and measures in connection with Art. 7 LIS	Athens	Nov.	WHO	15
14. Workshop on airborne pollution	-	Dec.	WMO	20
15. Training course on analysis of-physical ocean. data	-	-	IOC	15

Annex VIII

I PUBLISHED ISSUES OF MAP TECHNICAL REPORTS SERIES

- No. 1 UNEP/IOC/WMO: Baseline studies and monitoring of oil and petroleum hydrocarbons in marine waters (MED POL I). MAP Technical Reports Series No. 1. UNEP, Athens 1986.
- No. 2 UNEP/FAO: Baseline studies and monitoring of metals, particularly mercury and cadmium, in marine organisms (MED POL II). MAP Technical Reports Series No. 2. UNEP, Athens 1986.
- No. 3 UNEP/FAO: Baseline studies and monitoring of DDT, PCBs and other chlorinated hydrocarbons in marine organisms (MED POL III). MAP Technical Reports Series No. 3. UNEP, Athens 1986.
- No. 4 UNEP/FAO: Research on the effects of pollutants on marine organisms and their populations (MED POL IV). MAP Technical Reports Series No. 4. UNEP, Athens 1986.
- No. 5 UNEP/FAO: Research on the effects of pollutants on marine communities and ecosystems (MED POL V). MAP Technical Reports Series No. 5. UNEP, Athens 1986.
- No. 6 UNEP/IOC: Problems of coastal transport of pollutants (MED POL VI). MAP Technical Reports Series No. 6. UNEP, Athens 1986.
- No. 7 UNEP/WHO: Coastal water quality control (MED POL VII). MAP Technical Reports Series No. 7. UNEP, Athens 1986.
- No. 8 UNEP/IAEA/IOC: Biogeochemical studies of selected pollutants in the open waters of the Mediterranean (MED POL VIII). MAP Technical Reports Series No. 8. UNEP, Athens 1986.
- No. 8 Add.1 UNEP: Biogeochemical studies of selected pollutants in the open waters of the Mediterranean (MED POL VIII). Addendum, Greek Oceanographic Cruise 1980. MAP Technical Reports Series No. 8, Addendum. UNEP, Athens 1986.
- No. 9 UNEP: Co-ordinated mediterranean pollution monitoring and research programme (MED POL - PHASE I). Final report. 1975 - 1980. MAP Technical Reports Series No. 9. UNEP, Athens, 1986.
- No.10 UNEP: Research on the toxicity, persistence, bioaccumulation, carcinogenicity and mutagenicity of selected substances (Activity G). Final reports on projects dealing with toxicity (1983-85). MAP Technical Reports Series No. 10. UNEP, Athens, 1987.

- No.11 UNEP: Rehabilitation and reconstruction of Mediterranean historic settlements. Documents produced in the first stage of the Priority Action (1984-1985). MAP Technical Reports Series No. 11. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1986.
- No.12 UNEP: Water resources development of small Mediterranean islands and isolated coastal areas. Documents produced in the first stage of the Priority Action (1984-1985). MAP Technical Reports Series No. 12. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.13 UNEP: Specific topics related to water resources development of large Mediterranean islands. Documents produced in the second phase of the Priority Action (1985-1986). MAP Technical Reports Series No. 13. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.14 UNEP: Experience of Mediterranean historic towns in the integrated process of rehabilitation of urban and architectural heritage. Documents produced in the second phase of the Priority Action (1986). MAP Technical Reports Series No. 14. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987
- No.15 UNEP: Environmental aspects of aquaculture development in the Mediterranean region. Documents produced in the period 1985-1987. MAP Technical Reports Series No. 15. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.16 UNEP: Promotion of soil protection as an essential component of (in environmental protection in Mediterranean coastal zones. Selected print) documents (1985-1987). MAP Technical Reports Series No. 16. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.17 UNEP: Seismic risk reduction in the Mediterranean region. Selected (in studies and documents (1985-1987). MAP Technical Reports Series No. print) 17. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.18 UNEP/FAO/WHO: Assessment of the state of pollution of the Mediterranean Sea by mercury and mercury compounds. MAP Technical Reports Series No. 18. UNEP, Athens, 1987.
- No.19 UNEP/IOC: Assessment of the state of pollution of the Mediterranean Sea by petroleum hydrocarbons. MAP Technical Reports Series No. 19, UNEP, Athens, 1988.
- No.20 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 health effects (1983-86). MAP Technical Reports Series No. 20. UNEP, Athens, 1988.

- No.21 UNEP/UNESCO/FAO: Eutrophication in the Mediterranean Sea: Receiving Capacity and Monitoring of Long term Effects. MAP Technical Reports Series No. 21. UNEP, Athens, 1988.
- No.22 UNEP/FAO: Study of ecosystems modifications in areas influenced by pollutants (Activity I). MAP Technical Reports Series No.22. UNEP, Athens, 1988.
- No.23 UNEP: National Monitoring Programme of Yugoslavia, Report for 1983-1986. MAP Technical Reports Series No. 23. UNEP, Athens, 1988.
- No.24 UNEP/FAO: Toxicity, persistence and bioaccumulation of selected substances to marine organisms (Activity G). MAP Technical Reports Series No.24. UNEP, Athens, 1988.
- No.25 E.C. Raftopoulos: The Mediterranean Action Plan in a functional Perspective: A Quest for Law and Policy. MAP Technical Reports Series No. 25. UNEP, Athens, 1988.

II PLANNED ISSUES OF MAP TECHNICAL REPORT SERIES

- Survival of pathogens (act. K)	WHO
- Physical processes	IOC
- Atmospheric pollution (Belgrade)	WMO
- Jellyfish	UNEP
- Sedimentation	IAEA
- Atmospheric (Dayan)	WMO
- Activity A	WHO
- Activity D	WHO
- Activity G	WHO
- Organotin	FAO
- Organophosphorus	FAO
- Persistent synthetic materials	IOC
- Organohalogen	FAO
- Organohalogen workshop	IAEA
- Activity G	FAO
- Activity I	FAO
- Physical processes (Zagreb Meeting)	IOC
- Bibliography climatic changes	UNEP
- Med. Regional Report	UNEP
- Israel Monitoring	UNEP
- Cyprus Monitoring	UNEP
- Directory of SPA	UNEP

Annex IX

Tentative Agenda of the
Second Meeting of the Scientific and Technical Committee
Athens, 29 May - 3 June 1989

1. Opening of the Meeting
2. Rules of procedure
3. Election of Officers
4. Adoption of the agenda
5. Organization of work
6. Progress report on the implementation of MED POL during 1988/1989 and proposed activities and budgetary requirements for the biennium 1990/1991
7. Progress in the implementation of the Land-based Sources Protocol
8. Progress in the implementation of the Dumping Protocol
9. Assessment of the state of pollution in the Mediterranean Sea by used lubricating oils and proposed measures
10. Assessment of the state of pollution in the Mediterranean Sea by cadmium and proposed measures
11. Assessment of the state of pollution in the Mediterranean Sea by organotin compounds and proposed measures
12. Assessment of the state of pollution in the Mediterranean Sea by organohalogen compounds and proposed measures
13. Assessment of the monitoring component of MED POL and proposals for future work
14. Implications and control of plankton blooms in the Mediterranean
15. Assessment of the implications of climatic changes in the Mediterranean
16. Progress report on the work of the Regional Oil Combating Centre (ROCC) during 1988/1989 and proposed activities and budgetary requirements for the biennium 1990/1991
17. Progress in the implementation of the Emergency Protocol
18. Progress report on the work of the Specially Protected Areas/Regional Activity Centre (SPA/RAC) during 1988/1989 and proposed activities and budgetary requirements for the biennium 1990-1991
19. Progress in the implementation of the Specially Protected Areas Protocol
20. Other business
21. Adoption of the Report
22. Closure of the Meeting

Annex X

UNEP/FAO/IOC/WHO Meeting on Implications and control
of undesirable plankton blooms
(Athens, 8 - 10 March 1989)

Agenda

1. Opening of the meeting
2. Rules of procedure
3. Election of officers
4. Adoption of the Agenda
5. Organization of work
6. Review of previous and ongoing activities
7. Causes and preventive actions
8. Effects and remedial actions
 - 8.1. Existing measures in other regions
 - 8.2. Guidelines for detecting and monitoring eutrophication in the marine environment
 - 8.3. Outline of an assessment document
9. Coordination with existing national and international programmes
10. Conclusions and recommendations
11. Other business
12. Adoption of the report
13. Closure of the meeting

Annex XI

Meeting of responsible investigators of monitoring programmes
(Athens, 20-24 March 1989)

Agenda

1. Opening of the meeting
2. Rules of procedure
3. Election of officers
4. Adoption of the Agenda
5. Evaluation of the monitoring component of MED POL
 - 5.1. General overview
 - 5.2. Sources of pollution
 - 5.3. Coastal and reference areas
 - 5.3.1. Halogenated hydrocarbons
 - 5.3.2. Heavy metals
 - 5.3.3. Microbial contaminants
 - 5.4. Airborne pollution
 - 5.5. Conclusions and recommendations
6. Other business
7. Adoption of the report
8. Closure of the meeting

Annex XII

Meeting of Responsible Investigators
for Monitoring Programmes

Athens, 20-24 March 1989

ASSESSMENT OF THE MONITORING COMPONENT
(MED POL-PHASE II)

POSITION PAPER OF THE SECRETARIAT

(Outline)

1. INTRODUCTION (F.S. Civili)
2. OVERVIEW (F.S. Civili)
3. GENERAL CONCEPT (L. Jeftic)

4. MONITORING OF SOURCES (L. Saliba)
 - 4.1. GEOGRAPHICAL COVERAGE
 - 4.2. TEMPORAL COVERAGE
 - 4.3. PARAMETERS
 - 4.3.1. PRESENT STATUS
 - 4.3.2. OTHER ITEMS OF ANNEXES I AND II OF LBS PROTOCOL

 - 4.4. MATRICES
 - 4.5. SAMPLING AND ANALYTICAL METHODS
 - 4.6. DATA QUALITY ASSURANCE
 - 4.7. DATA COLLECTION, PROCESSING AND PRESENTATION
 - 4.8. UTILIZATION OF DATA
 - 4.9. PROPOSALS FOR FUTURE WORK

5. MONITORING OF COASTAL AND REFERENCE AREAS
 - 5.1 MICROBIAL POLLUTION (L. Saliba)
 - 5.1.1. GEOGRAPHICAL COVERAGE
 - 5.1.2. TEMPORAL COVERAGE
 - 5.1.3. PARAMETERS
 - 5.1.3.1. PRESENT STATUS
 - 5.1.3.2. OTHER PARAMETERS

 - 5.1.4. MATRICES
 - 5.1.4.1. BATHING WATERS AND SHELLFISH GROWING AREAS
 - 5.1.4.2. ORGANISMS
 - 5.1.4.3. SEDIMENTS

 - 5.1.5. SAMPLING AND ANALYTICAL METHODS
 - 5.1.6. DATA QUALITY ASSURANCE
 - 5.1.7. DATA COLLECTION, PROCESSING AND PRESENTATION
 - 5.1.8. UTILIZATION OF DATA
 - 5.1.9. PROPOSALS FOR FUTURE WORK

 - 5.2. HALOGENATED HYDROCARBONS (G. Gabrielides)
 - 5.2.1. GEOGRAPHICAL COVERAGE
 - 5.2.2. TEMPORAL COVERAGE
 - 5.2.3. PARAMETERS
 - 5.2.3.1. PRESENT STATUS
 - 5.2.3.2. OTHER ITEMS OF ANNEXES I AND II OF LBS PROTOCOL

5.2.4. MATRICES

- 5.2.4.1. WATERS
- 5.2.4.2. ORGANISMS
- 5.2.4.3. SEDIMENTS

- 5.2.5. SAMPLING AND ANALYTICAL METHODS
- 5.2.6. DATA QUALITY ASSURANCE (L. Mee)
- 5.2.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.2.8. UTILIZATION OF DATA
- 5.2.9. PROPOSALS FOR FUTURE WORK

5.3. PETROLEUM HYDROCARBONS (G. Kulleberg)

- 5.3.1. GEOGRAPHICAL COVERAGE
- 5.3.2. TEMPORAL COVERAGE
- 5.3.3. PARAMETERS

- 5.3.3.1. PRESENT STATUS
- 5.3.3.2. OTHER ITEMS OF ANNEXES I AND II OF LBS
PROTOCOL

5.3.4. MATRICES

- 5.3.4.1. WATER
- 5.3.4.2. ORGANISMS
- 5.3.4.3. SEDIMENTS

- 5.3.5. SAMPLING AND ANALYTICAL METHODS
- 5.3.6. DATA QUALITY ASSURANCE (L. Mee)
- 5.3.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.3.8. UTILIZATION OF DATA
- 5.3.9. PROPOSALS FOR FUTURE WORK

5.4. HEAVY METALS (G. Gabrielides)

- 5.4.1. GEOGRAPHICAL COVERAGE
- 5.4.2. TEMPORAL COVERLAGE
- 5.4.3. PARAMETERS

- 5.4.3.1. PRESENT STATUS
- 5.4.3.2. OTHER ITEMS OF ANNEXES I AND II OF LBS
PROTOCOL

5.4.4. MATRICES

- 5.4.4.1. WATER
- 5.4.4.2. ORGANISMS
- 5.4.4.3. SEDIMENTS

- 5.4.5. SAMPLING AND ANALYTICAL METHODS
- 5.4.6. DATA QUALITY ASSURANCE (L. Mee)
- 5.4.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.4.8. UTILIZATION OF DATA
- 5.4.9. PROPOSALS FOR FUTURE WORK

5.5. NUTRIENTS (G. Kullenberg)

- 5.5.1. GEOGRAPHICAL COVERAGE
- 5.5.2. TEMPORAL COVERAGE
- 5.5.3. PARAMETERS
 - 5.5.3.1. PRESENT STATUS
 - 5.5.3.2. OTHER ITEMS OF ANNEXES I AND II OF LBS PROTOCOL

5.5.4. MATRICES

- 5.5.4.1. WATER
- 5.5.4.2. ORGANISMS
- 5.5.4.3. SEDIMENTS

- 5.5.5. SAMPLING AND ANALYTICAL METHODS
- 5.5.6. DATA QUALITY ASSURANCE
- 5.5.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.5.8. UTILIZATION OF DATA
- 5.5.9. PROPOSALS FOR FUTURE WORK

5.6. PERSISTENT SYNTHETIC MATERIALS (G. Kullenberg)

- 5.6.1. GEOGRAPHICAL COVERAGE
- 5.6.2. TEMPORAL COVERAGE
- 5.6.3. PATRAMETERS
- 5.6.4. MATRICES
- 5.6.5. SAMPLING AND ANALYTICAL METHODS
- 5.6.6. DATA QUALITY ASSURANCE
- 5.6.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.6.8. UTILIZATION OF DATA
- 5.6.9. PROPOSALS FOR FUTURE WORK

5.7. PHYSICAL OCEANOGRAPHY (G. Kullenberg)

- 5.7.1. GEOGRAPHICAL COVERAGE
- 5.7.2. TEMPORAL COVERAGE
- 5.7.3. PARAMETERS
- 5.7.4. MATRICES
- 5.7.5. SAMPLING AND ANALYTICAL METHODS
- 5.7.6. DATA QUALITY ASSURANCE
- 5.7.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.7.8. UTILIZATION OF DATA
- 5.7.9. PROPOSALS FOR FUTURE WORK

5.8. OTHER PARAMETERS (F.S. Civili)

- 5.8.1. GEOGRAPHICAL COVERAGE
- 5.8.2. TEMPORAL COVERAGE
- 5.8.3. PARAMETERS
- 5.8.4. MATRICES
- 5.8.5. SAMPLING AND ANALYTICAL METHODS
- 5.8.6. DATA QUALITY ASSURANCE
- 5.8.7. DATA COLLECTION, PROCESSING AND PRESENTATION
- 5.8.8. UTILIZATION OF DATA
- 5.8.9. PROPOSALS FOR FUTURE WORK

6. MONITORING OF AIRBORNE POLLUTION (A. Soudine)

- 6.1. CURRENT STATUS
- 6.2. PROPOSALS FOR FUTURE WORK

7. GENERAL CONCLUSIONS AND RECOMMENDATIONS (L. Jeftic)

Annex XIII

Refocusing of MED POL Research component

The whole research component is re-oriented to generate information useful for the technical implementation of the LBS protocol.

Five new research areas are recommended to replace the old research activities A-L.

Target contaminants or other variables will be defined at periodic intervals depending on the progress of implementation of the LBS protocol.

Research area (1)

Characterization and measurement

This area will include projects which research into the characterization (identification of chemical or microbiological components) and measurement (development and testing of methodologies) of specified contaminants.

Research area (2)

Transport and dispersion

The research will concentrate on improving understanding of the physical, chemical and biological mechanisms that transport potential pollutants from their sources to their ultimate repositories. This area will include such topics as atmospheric transport and deposition, water movements and mixing, the transport of contaminants by sedimentation and their incorporation in biogeochemical cycles. The research should concentrate on the provision of quantitative information ultimately useful for modelling the system and contributing to regional assessments.

Research area (3)

Effects

Includes projects relevant to the effects of selected contaminants listed in Annex I and II of the LBS and Dumping protocols to selected organisms or man; the effects on pollution on marine communities and ecosystems and human populations.

Research area (4)

Fates

This area includes projects studying the fate of contaminants (including micro-organisms) in the marine environment such as persistence or survival, degradation, bioaccumulation, etc. but excluding transport and dispersion which is dealt with in area (2).

Research area (5)

Prevention and control

Includes projects relevant to the determination of the factors affecting the efficiency of waste treatment and disposal methods under specific local conditions as well as the development of Environmental Quality Criteria and common measures.

Annex XIV

1990-1991 Meetings

1990

- XXIII IAAC
- Ad hoc Consultation Meeting on data processing
- Ad hoc Consultation Meeting on selected elements from item 1 of annex II of the LBS protocol
- Ad hoc Consultation Meeting on herbicides and fungicides
- Consultation Meeting on pollution from land-based sources
- Data Quality Assurance and training course on determination of microbiological pollution
- Intercalibration and training workshop on determination of organotin compounds
- Consultation Meeting on environmental transformation of chemical contaminants
- Workshop on modelling of transport and dispersion of pollutants in the sea

1991

- XXIV IAAC
- IV Meeting of Scientific and Technical Committee
- Ad hoc Consultation Meeting on monitoring
- Ad hoc Consultation Meeting on data processing
- Consultation Meeting on Data Quality Assurance Programme
- Workshop on Airborne Pollution
- Data Quality Assurance and Training Course on determination of Microbiological pollution
- Consultation Meeting on sample work-up for organic contaminants analysis
- Training workshop on statistical treatment and interpretation of marine community data
- Consultation Meeting on health effects of chemical contaminants in Mediterranean sea food
- Workshop on effects of pollutants on marine organisms, communities and ecosystems

Annex XV

SECTION I
CHAPTER 3 - MED POL - MONITORING

	m/m	Proposed	
		1990	1991
<u>1. PERSONNEL</u> <u>A/</u>			
<u>(a) Experts/Staff</u>			
- FAO Fishery Expert, P-5	12	69,000	70,000
- WHO Senior Scientist, P-5	12	71,000	72,000
- IAEA Maintenance Engineer, P-3	12	69,000	70,000
Sub-total 1(a)		209,000	212,000
<u>(b) Consultants</u>			
		30,000	30,000
Sub-total 1(b)		30,000	30,000
<u>(c) Administrative Support</u>			
- FAO Secretary, Athens, Local, G-3	12	11,500	12,000
- WHO Secretary, Athens, Local, G-4	12	12,500	13,000
- WHO Secretary, Copenh. Local, G-4	6	10,500	11,000
- IAEA Lab. Assist., Monaco, Local, G-4	12	24,500	25,000
Sub-total 1(c)		59,000	61,000
Component total		298,000	303,000
<u>2. TRAVEL</u> <u>B/</u>			
- FAO		12,000	12,000
- UNESCO/IOC		6,000	6,000
- WHO		12,000	12,000
- WMO		8,000	8,000
- IAEA		24,000	24,000
Component total		62,000	62,000

A/ The cost of UNEP staff involved in MED POL is covered through Chapter I (Co-ordination) of MAP budget

B/ The cost of travel of UNEP staff in connection with MED POL is covered through Chapter I (Co-ordination) of MAP budget

	Proposed	
	1990	1991
3. SUBCONTRACTS		
<u>Land-based Sources Protocol implementation:</u>		
- Pilot project on monitoring of non-biodegradable detergents and other surface-active substances	25,000	10,000
- Pilot project on monitoring of herbicides and fungicides	25,000	10,000
- Pilot project on monitoring of selected elements from item 1 of the Annex II of the LBS Protocol	25,000	10,000
- Assessment of the present state of pollution in the Mediterranean Sea by pathogenic organisms	5,000	-
- Common guidelines for the determination of the length, depth and position of pipelines for coastal outfalls	5,000	5,000
- Compilation of a Mediterranean inventory of effluents requiring special and/or separate treatment	5,000	5,000
- Formulation of draft common guidelines, standards and criteria for effluents necessitating separate treatment	5,000	5,000
- Preparation of common guidelines for the inventory of air pollution sources	5,000	-
- Assessment of implications of climatic changes in the Mediterranean	20,000	20,000
- Assistance to countries for the implementation of LBS Protocol (experts, training, etc.)	40,000	30,000
<u>Data quality assurance:</u>		
- Data quality assurance and training course on determination of microbiological pollution	20,000	20,000
- Intercalibration and training workshop on determination of organotin compounds	15,000	-

	Proposed	
	1990	1991
- Training workshop on statistical treatment and interpretation of marine community data	-	20,000
- Consultation meeting on data quality assurance	-	15,000
- Workshop on sample work-up for organic contaminant analysis	-	15,000
- Purchase of standards and reference materials to be distributed to laboratories	20,000	23,000
- Joint exercises on monitoring and intercomparison of results including sampling and analysis of split samples, expert assistance to laboratories for sampling, analysis, presentation and evaluation of results and improved arrangement for dissemination of relevant scientific material	70,000	70,000
<u>Monitoring:</u>		
- Assistance through agreements for monitoring programmes	580,000	580,000
Component total	865,000	838,000
4. MEETINGS/TRAINING/WORKSHOPS/FELLOWSHIPS		
<u>MEETINGS:</u>		
- Scientific and Technical Committee	-	55,000
<u>Data quality assurance:</u>		
- <u>Ad hoc</u> consultation meeting on data processing	8,000	7,500
- <u>Ad hoc</u> consultation meeting on monitoring	-	7,500
- <u>Ad hoc</u> consultation meeting on herbicides and fungicides	7,500	-
- <u>Ad hoc</u> consultation meeting on elements for the item 1 of Annex II of the IBS Protocol	7,500	-

	Proposed	
	1990	1991
- Workshop on airborne pollution	-	15,000
- Consultation meeting on pollution from land-based sources	*	-
TRAINING:		
- On-the-job training (through the Secretariat)	80,000	70,000
FELLOWSHIPS:		
- Attendance at meetings	75,000	45,000
Component total	178,000	200,000
5. EQUIPMENT		
(a) <u>Expendable</u> :		
Spare parts for common maintenance services (through IAEA)	38,000	38,000
(b) <u>Non-expendable</u> :		
Laboratory equipment (to ILMR), purchase and maintenance	16,000	16,000
Component total	54,000	54,000
TOTAL CHAPTER 3	1,457,000	1,457,000

* Budgeted by WHO/EURO

SECTION I
 CHAPTER 4 - MED POL - RESEARCH

	Proposed	
	1990	1991
A. SUBCONTRACTS		
Research Areas I-V	300,000	300,000
Component total	300,000	300,000
B. MEETINGS		
Consultation Meeting on health effects of chemical contaminants in Mediterranean sea food (Research area III)	-	15,000
Consultation Meeting on environmental transformation of chemical contaminants (Research area IV)	15,000	-
Workshop on effect of pollutants on marine organisms, communities and ecosystems (Research area III)	-	15,000
Workshop on modelling of transport and dispersion of pollutants in the sea (Research area II)	15,000	-
Component total	30,000	30,000
TOTAL CHAPTER 4	330,000	330,000