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XVI Meeting of the Inter-agency Advisory
Committee (IAAC) for MED POL

Athens, 21-25 November, 1983

M I N U T E S

INTRODUCTION

1. The meeting was convened by the Co-ordinating Unit for the Mediterranean Action Plan in collaboration with the Regional Seas Programme Activity Centre of UNEP. All the Co-operating Agencies (FAO, WHO, UNESCO, IOC, WMO and IAEA) were invited to attend this meeting which took place in the MED Unit, 21 - 25 November 1983.
2. Representatives of the International organizations and of UNEP attended the meeting (see List of Participants, Annex I).

Agenda item 1 - Opening of the Meeting

3. Mr. A. Manos, Co-ordinator of the Mediterranean Action Plan, opened the meeting and welcomed the participants. He called the attention of the Committee to the importance of the participation of the Agencies representatives at the Second Meeting of the Working Group for Scientific and Technical Co-operation for MED MOL, which was being simultaneously held at the Unit. The Working Group meetings are major events in the implementation of the MED POL programme providing UNEP with advice on technical and policy matters.
4. Mr. A. Cruzado introduced the Agenda after apologizing for not having formally submitted a proper agenda on time for the meeting, after which the Agenda, as appears in Annex II, was approved.

Agenda item 2 - Report by the secretariat on the progress achieved in the implementation of the national monitoring programmes.

5. Mr. A. Cruzado referred to the progress reports on the monitoring activities of MED POL being presented at the Working Group's Meeting after informing of the designation of National Co-ordinator for MED POL in Syria and the change of National Co-ordinator in Algeria. An up-to-date list is attached as Annex III.

Agenda item 3 - Report on the activities carried out by each Co-operating Agency

6. The representatives of the Co-operating Agencies referred to the half-yearly progress reports recently submitted to UNEP as well as to the substantive reports submitted by request of UNEP earlier in the year.
7. Mr. A. Manos expressed the recognition of the Med Unit for the effort put by the Agencies' secretariats in preparing these reports. With regard to the final reports summarizing the results of MED POL - PHASE II, Mr. S. Keckes asked the agencies which had not yet submitted their updated versions of the report to do so in the shortest possible delays.
8. In particular, the deadlock status of the report on the MED POL - PHASE I DRIFTEX which was to be prepared by IOC was solved by giving the Med Unit the responsibility of preparing the report on the basis of the original materials supplied by the Instituto de Investigaciones Pesqueras at present in the Med Unit. A draft version of the final report will be submitted to IOC for clearance before printing.

Agenda item 4 - Preparation of the workplan/timetable and budget for 1984

9. A detailed workplan, prepared by the Committee on the basis of a preliminary version attached to revision n° 5 of the project document is presented in Annex IV. It was agreed that FAO should undertake the organization of the workshops on activities 'G' and 'K', which had been approved by the WGSTC. As regards activity 'K', FAO will co-operate with WHO.
10. Mr. Cruzado presented a proposed budget breakdown for 1984 activities as it had been approved by the Bureau of the Contracting Parties with minor modifications for adapting it to the budget proposed to the Meeting of the WGSTC. He noted that the budget breakdown by research activity was only indicative and that it would be finalised after the submission of the research proposals in the next IAAC Meeting. The budget for 1984 showing allocations to Agencies is shown at Annex V. This budget does not include the amounts in relation to 1983 research activities to be rephased into 1984. It was agreed that the figures would be provided by the Agencies as soon as possible after 31 December 1983.
11. Concern was expressed by the representatives of IOC/UNESCO and of WMO on the absence of funds allocated for administrative support to these agencies. It was also pointed out that since FAO has now a full-time staff member in the Unit, it should increase its involvement in the monitoring programmes by purchasing equipment for the national research centres and by assisting in the organization of training in as far as the analysis of chemical contaminants in marine organisms is concerned.
12. The secretariat informed the Meeting of its intention to have revision n°6 to the project document prepared during January 1984 covering all the activities except new research contracts which would be covered later in the year.

Agenda item 5 - Publication of the scientific report of MED POL research activities

13. The publication of the scientific reports submitted by principal investigators through the Co-operating Agencies in the course or at the end of the research projects being carried out in the framework of MED POL was discussed. It was agreed that such reports requested at yearly intervals by the Co-operating Agencies would be published by the Med Unit as a periodical publication issued in co-operation with all the Co-operating Agencies and that the usual format and extension of scientific publications would be followed.

Agenda item 6 - Other matters

14. No other matters were discussed.

Agenda item 7 - Adoption of the Minutes and closure of the Meeting

15. It was agreed by the Committee, in view of the lack of time, that the Minutes would be cleared by correspondence. The Meeting was closed on 25 November 1983.

ANNEX I

List of Participants

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ANNEX II

Agenda

1. Opening of the Meeting
2. Report by the secretariat on the progress achieved in the implementation of the national monitoring programmes
3. Report on the activities carried out by each Co-operating Agency
4. Preparation of the workplan/timetable and budget for 1984
5. Publication of the scientific reports of MED POL research activities
6. Other matters
7. Adoption of the Minutes and closure of the Meeting

ANNEX III

Updated list of National Co-ordinators
as at November 1983

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ANNEX IV

Workplan and Timetable
for the Implementation of MED POL - PHASE II

(January - December 1984)

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
1. Inter-Agency Advisory Committee Meetings (XVII) April 1984 (XVIII) December 1984	MED UNIT in collaboration with all Co-operating Agencies
2. Third Meeting of Working Group for Scientific and Technical Co-operation December 1984	MED UNIT in collaboration with all Co-operating Agencies
3. Continuing processing and quality control of MED POL data Ongoing	MED UNIT and all Co-operating Agencies
4. Development and testing analytical and computational methods for monitoring the transport of pollutants to the Mediterranean Sea through the atmosphere	WHO and IAEA in consultation with MED UNIT
(i) the two BAPMON stations who obtained from WMO the high volume samplers will proceed with a daily sampling scheme. The station in France will analyze for Cd and eventually for Hg and Pb. Sixty samples (Cd, Hg, Pb) collected by the station in Yugoslavia will be selected and analyzed by ILMR.	WMO and IAEA
Visits will be paid to these stations by representative of WMO, IAEA and UNEP, February 1984. Reports from the two stations will be sent to MED Unit through WMO, January 1984.	

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
(ii) development of relevant sampling and analytical methods:	WMO and IAEA
- determination of selected trace metals in aerosols and in wet precipitation (to be prepared by IAEA)	
- May 1984	
- sampling of dry deposition (its preparation to be discussed at XVII IAAC)	
- April 1984	
(iii) preparation of back-trajectories on the two sampling stations mentioned under (i)	WMO
- January 1984	
(iv) preparation of a summary of meteorological information on the Mediterranean	WMO
- March 1984	
(v) preparation of proposal for pilot project to be developed in 1984-1985 (draft proposal to be discussed at XVI IAAC)	WMO and MED UNIT
- July 1984	
(vi) development of computational model for atmospheric transport of pollutants for the Mediterranean region (to be done as research project under activite 'L').	WMO and national research centres
- July 1984	
(vii) provision of hi-vol sampling equipment to four other stations to be identified in consultation with MED UNIT	WMO and MED UNIT
5. Continued support to national research centres through common maintenance services for their analytical equipment	IAEA under guidance of MED UNIT
(i) regular maintenance to all research centres which received capital equipment through MED POL	
- ongoing	

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
(ii) ad hoc emergency visits	
- ongoing	
6. Support to national research centres in intercalibration of physical, chemical and microbiological methods and quality control of data	IAEA, WHO and IOC in consultation with MED UNIT and IOC/GEMSI as appropriate
(i) report on the 1983 intercalibration of analytical methods for petroleum hydrocarbons carried out by the Bermuda Biological Station under IOC's contract	IOC in consultation with MED UNIT
- January 1984	
(ii) intercalibration of analytical techniques for petroleum hydrocarbons and consultation on reference methods	IOC
proposal to be submitted by IOC by January 1984	
(iii) intercalibration of analytical methods for metals and organics	IAEA and MED Unit
- dispatch of fish and shrimp samples by IAEA	
- May 1984	
(iv) intercalibration of bacteriological and related methods used in monitoring of recreational and shellfish growing waters	WHO in consultation with MED UNIT
- laboratory exercise (in english) to be organized in Athens for national scientists plus 4/5 additional participants	
- May 1984	
- laboratory exercise to be organized in a French-speaking country to be identified	
- October 1984	
- preparation of reference samples of sediments and shellfish (shell and flesh) for metals and chlorinated hydrocarbons	IAEA
- December 1984	

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
7. Assistance to national research centres through National Co-ordinators for the organization and implementation of the national monitoring programmes (i) relevant agencies will purchase instruments and assist in the organization of training - ongoing	MED UNIT in collaboration with FAO WHO, IOC/UNESCO, WMO, IAEA
8. Printing of the Proceedings of VI ICSEM/IOC/UNEP Workshop on Pollution of the Mediterranean - February 1984	ICSEM in co-operation with MED UNIT
9. Development and testing sampling and analytical techniques for pollution monitoring and research and their formulation as reference methods for marine pollution studies - (see the Appendix to this Workplan) - consultation meeting to evaluate the testing and revise reference methods nos 6 - 14 - March 1984	MED UNIT under the guidance of RS/PAC and in co-operation with relevant specialized agencies and selected national research centres FAO
10. Development of reporting formats required according to the Dumping, Emergency and Land-Based Sources Protocols (i) development of draft formats on the authorizations granted in accordance with article 6 of the LBS Protocol - March 1984	MED UNIT in collaboration with relevant co-operating agencies WHO/FAO/IAEA

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
(ii) development of draft formats for reporting the amounts of substances discharged in accordance with article 13 of the LBS Protocol. - March 1984	WHO/FAO/IAEA
11. Formulation of scientific rationale for environmental quality criteria to be used in the development of emission standards, standards of use and of guidelines for their application for substances listed in Annexes I and II of the LBS Protocol (i) draft definition of substances listed in Annexes I and II of LBS Protocol - March 1984 (ii) draft definition of substances listed in Annexes I and II of Dumping Protocol - March 1984 (iii) development of proposals for emission standards for selected substances listed in Annex II of LBS Protocol and for selected standards of use as requested by article 7 of the Protocol. Specifically: (iv) -March 1984	MED UNIT in collaboration with relevant Co-operating Agencies and in co-operation with selected national research centres WHO/IRPTC WHO/IRPTC WHO/FAO/IOC
12. Epidemiological studies related to the confirmation/revision of the proposed environmental quality criteria for bathing water, shellfish-growing waters and edible marine organisms (i) implementation of research proposals approved and/or extended - December 1984 (ii) call for new research proposals - March 1984 (iii) clearance of new research agreements - June 1984	WHO and FAO in co-operation with selected national research centres

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
(iv) implementation of new research projects - July - December 1984	
(v) consultation meeting on epidemiological studies on health effects of methylmercury - September 1984	WHO
13. Development of proposals for guidelines governing the application of the LBS Protocol as requested in article 7 of the Protocol	MED UNIT in collaboration with relevant Co-operating Agencies and in co-operation with selected national research centres
(i) formulation of draft guidelines and criteria for the length, depth and position of pipelines for coastal outfalls - March 1984	WHO
(ii) formulation of draft guidelines for the issuance of authorizations for the discharge of wastes containing substances referred to in Annex II or in section B of Annex I to the LBS Protocol - March 1984	WHO
(iii) formulation of draft guidelines for special requirements for effluents necessitating separate treatment - March 1984	WHO/UNIDO
(iv) formulation of draft guidelines for the control and progressive replacement of products, installations and industrial and other processes causing significant pollution of the marine environment - March 1984	WHO

ACTIVITYRESPONSIBILITY

14. Research on oceanographic processes, with particular emphasis on surface circulation and vertical transport
- IOC in co-operation with selected national research centres
- (i) development of field measurements required for the continual upgrading of numerical models developed for the purpose of assessing pollutant-receiving capacity of coastal environment through the implementation of research proposals
- implementation of research proposals approved and/or extended
- December 1984
- (ii) gather information on ongoing work relevant to oceanographic processes playing a leading role in surface circulation and vertical transport of water masses
- ongoing
- (iii) call for new research proposals
- March 1984
- (iv) clearance of new research agreements
- June 1984
- (v) implementation of new research projects
- July - December 1984

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
15. Research on toxicity, persistence, bioaccumulation, carcinogenicity and mutagenicity of selected substances listed in the Annexes of the LBS and Dumping Protocols	FAO and WHO in co-operation with selected national research centres
(i) implementation of research proposals approved and/or extended	
- December 1984	
(ii) call for new research proposals	
- March 1984	
(iii) clearance of new research agreements	
- June 1984	
(iv) implementation of new research projects	
- July - December 1984	
16. Workshop on toxicity, persistence and biocaccumulation	FAO
- November 1983	
17. Research on eutrophication and concomitant plankton blooms	FAO and UNESCO in co-operation with selected national research centres
(i) development of draft guidelines for the assessment of receiving capacity for eutrophication substances and of monitoring of long-term trends of eutrophication	UNESCO in collaboration with GESAMP Working Group n° 23
- March 1984	
(ii) implementation of approved and/or extended research proposals as case studies following the above guidelines	FAO in co-operation with selected national research centres
- December 1984	

ACTIVITY

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- (iii) call for new research proposals
- March 1984
- (iv) clearance of new research agreements
- June 1984
- (v) implementation of new research projects
- July - December 1984
18. Study of ecosystem modifications in areas influenced by pollutants and in areas where ecosystem modifications are caused by large-scale coastal or inland engineering activity
FAO in co-operation with selected national research centres
- (i) implementation of approved and/or extended research proposals as case studies following guidelines already developed by FAO
- December 1984
- (ii) call for new research proposals
- March 1984
- (iii) clearance of new research agreements
- June 1984
- (iv) implementation of new research projects
- July - December 1984
19. Study on the effects of thermal discharges
FAO in co-operation with selected national research centres
- (i) implementation of approved and/or extended research proposals as case studies
- December 1984
- (ii) call for new research proposals
- March 1984

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
(iii) clearance of new research agreements - June 1984	
(iv) implementation of new research projects - July - December 1984	
20. Study of biogeochemical cycles of specific pollutants, particularly those relevant to human health	FAO, IAEA and WHO in co-operation with selected national research centres
a) mass balance of mercury	FAO
b) mass balance of lead	IAEA
c) survival of pathogens	WHO
(i) implementation of research proposals approved - December 1984	
(ii) call for new research proposals - March 1984	
(iii) clearance of new research agreements - June 1984	
(iv) implementation of new research projects - July - December 1984	
21. Workshop on the biogeochemical cycle of mercury in the Mediterranean Sea - July 1984	FAO in co-operation with WHO

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
22. Study of pollutant transfer processes:	UNESCO, WMO and IOC in co-operation with selected national research centres
a) at river/sea interface	UNESCO
b) at air/sea interface	WMO in collaboration with GESAMP Working Group n 14
c) by sedimentation	IAEA
d) through the straits	IOC
(i) implementation of research proposals approved and/or extended	
- December 1984	
(ii) call for new research proposals	
- March 1984	
(iii) clearance of new research agreements	
- June 1984	
(iv) implementation of new research projects	
- July - December 1984	
23. Development of assessments on the state of pollution of the Mediterranean Sea:	MED UNIT in co-ope- ration with relevant agencies
a) assessment of the present state of pollution by heavy metals other than mercury in the Mediterranean Sea	MED UNIT and FAO
b) assessment of the present state of pollution by chlorinated hydrocarbons in Mediterranean Sea	MED UNIT and FAO
c) assessment of the present state of pollution by petroleum hydrocarbons in the Mediterranean Sea	MED UNIT and IOC

<u>ACTIVITY</u>	<u>RESPONSIBILITY</u>
24. Completion of documentation relevant to MED POL - PHASE I :	MED UNIT in collaboration with relevant agencies:
a) issuance of Individual Scientific Reports of MED POL - PHASE I - March 1984	MED UNIT
b) updating of Summary Scientific Reports of MED POL - PHASE I - March 1984	FAO, WHO, IOC, IAEA
c) issuance of Summary Scientific Reports of MED POL - PHASE I - October 1984	MED UNIT

Appendix

Guidelines and Reference Methods for Marine
Pollution Studies

General Note:

The development, intercalibration, testing and revision of guidelines and Reference Methods will be co-ordinated by MED Unit under the guidance of RS/PAC and in co-operation with the relevant specialized agency. RS/PAC will issue the guidelines and Reference Methods (draft and final versions) and will ensure the participation of analysts from outside the Mediterranean Region. RS/PAC, through IOC, will ensure that Reference Methods are scrutinized by GEMSI.

A. Monitoring of coastal recreational and shellfish-growing waters

- No: 1 Guidelines for monitoring the quality of coastal recreational waters (draft being revised by WHO).
- No: 2 Determination of total coliforms in sea-water by the membrane filtration culture method (issued as Rev.1 in English and French).
- No: 3 Determination of faecal coliforms in sea-water by the membrane filtration culture method (issued as Rev.1 in English and French).
- No: 4 Determination of faecal streptococci in sea-water by the membrane filtration culture method (issued as Rev.1 in English and French).
- No: 5 Determination of faecal coliforms in bivalves by multiple test tube method (issued as Rev.1 in English and French).
- No: M Statistical methods for the evaluation of results from monitoring the quality of coastal recreational and shellfish-growing waters.
- No: 21 Determination of total coliforms in sea-water by multiple test tube method (being developed).
- No: 22 Determination of faecal coliforms in sea-water by multiple test tube method (being developed).

No: 23 Determination of faecal streptococci in sea-water by multiple test tube method (issued).

Note: Method 1 to include shellfish-growing waters and maybe combined with Method M (subject to be discussed and clarified between RS/PAC and WHO/EURO).

B. Monitoring of chemical contaminants (metals) in marine organisms

No: 6 Guidelines for monitoring chemical contaminants in marine organisms (being developed by FAO).

No: 7 Sampling of selected marine organisms and sample preparation for trace metals analysis (issued as Rev. 1).

No: 8 Determination of total mercury in selected marine organisms by flameless atomic absorption spectrophotometry (issued).

No: 9 Determination of total arsenic in selected marine organisms by flameless atomic absorption spectrophotometry (draft issued).

No: 10 Determination of total selenium in selected marine organisms by flameless atomic absorption spectrophotometry (draft issued).

No: 11 Determination of total cadmium, zinc, lead and copper in selected marine organisms by atomic absorption spectrophotometry (issued).

Note: Testing of Methods 7-11 being carried out using mussel as reference material for intercalibration. On the basis of results from the testing exercise a FAO/IAEA/UNEP consultation will be organized to finalize Methods 7-11. The consultation may be organized also as a training workshop if the results of the testing exercise indicate its appropriateness.

C. Monitoring of chemical contaminants (organics other than petroleum hydrocarbons) in marine organisms

- No: 6 Guidelines for monitoring chemical contaminants in marine organisms (being developed by FAO).
- No: 12 Sampling of selected marine organisms and sample preparation for the analysis of chlorinated hydrocarbons (issued).
- No: 13 Determination of methylmercury in selected marine organisms by gas-liquid chromatography (draft issued).
- No: 14 Determination of DDTs and PCBs in selected marine organisms by gas-liquid chromatography (issued).

Note: Testing of Methods 12-14 is organized in the same way as for Methods listed in Section B.

D. Monitoring of marine surface waters and beaches for contamination by petroleum hydrocarbons

- No: 15 Monitoring of tar on marine beaches (draft available).
- No: 20 Monitoring of petroleum hydrocarbons in sediments (being developed).
- No: B Monitoring of petroleum hydrocarbons in sea-water (being developed).

Note: Methods 20 and B will be prepared by IOC (June 1983), transmitted to RS/PAC, issued by RS/PAC and distributed by MED Unit to MED POL Focal Points with invitation for comments from national research centres. An intercalibration exercise and consultation is planned to be organized in 1984 to discuss the technical aspects of the Reference Methods.

E. Monitoring of estuaries

- No: C Guidelines for monitoring of estuarine waters and suspended matter (to be developed by RS/PAC).
- No: D Determination of faecal coliforms in sediments (being developed by WHO).
- No: E Determination of phosphorus in suspended matter and sediments (being developed by WHO).
- No: F Determination of nitrogen in suspended matter and sediments (being developed by WHO).
- No: G Determination of BOD₅ and COD in estuarine waters (being developed by WHO).

No: 19 Determination of total mercury in estuarine waters and suspended matter by cold vapour atomic absorption spectrophotometry (draft to be issued by RS/PAC).

No: . I Determination of total cadmium in estuarine waters and suspended matter (draft to be issued by RS/PAC).
RS/PAC will explore the applicability of ICES manual and its possible use for preparation of draft Method C by a consultant. Methods D, E, F and G being prepared by WHO, will be sent to RS/PAC and issued as drafts (March 1984). Methods 19 and I will be issued by RS/PAC (March 1984) as drafts. MED Unit will send all methods to MED POL National Co-ordinators and invite comments from national research centres. A consultation on technical matters is planned for 1985.

F. Monitoring of chemical contaminants in sea-water and marine sediments

No: 16 Determination of DDTs, PCBs, PCCs and other hydrocarbons in sea-water, estuarine water and suspended matter by gas chromatography (issued as draft).

No: 17 Determination of DDTs, PCBs, PCCs and other hydrocarbons in marine sediments by gas chromatography (issued as draft).

No: 18 Determination of total dissolved cadmium in sea-water by differential pulse anodic stripping voltammetry (issued as draft).

No: R Determination of total mercury in marine sediments by flameless atomic absorption spectrophotometry (being developed by ILMR).

No: S Determination of total cadmium in marine sediments by flameless absorption spectrophotometry (being developed by ILMR).

Note: Methods 16 - 18 issued as drafts were circulated for comments by ILMR. Methods R and S to be prepared by ILMR, to be sent to RS/PAC (March 1984) and issued as drafts. Drafts of Methods R and S to be distributed by ILMR for comments.

G. Monitoring of basic oceanographic and meteorological conditions

No: K Determination of basic oceanographic and meteorological conditions (being developed by IOC).

L Determination of standard physical and chemical parametry (to be issued as draft by RS/PAC).

H. Monitoring of pollutants in the atmosphere

No: N Sampling of aerosols and wet precipitation for analysis of chemical pollutants (draft being issued by RS/PAC).

No: O Determination of selected trace metals in aerosols and in wet precipitation (to be developed).

No: P Determination of halogenated hydrocarbons in aerosols and in wet precipitation (to be developed).

No: Q Sampling of dry deposition (to be developed).

Note: Methods O and P will be prepared by ILMR after samples are received from WMO and sent to RS/PAC to be issued as draft. The preparation of Method Q will be considered at next meeting of IAAC.

I. Other Reference Methods

The need for the preparation of additional reference methods was briefly discussed. It was agreed that Methods covering (a) monitoring of pollution sources and (b) pathogens would be undertaken by WHO as a priority item. In the former case, the methods would follow those existing for the same substances as far as possible. Methods covering acute toxicity test (FAO), methylmercury and selenium in human hair (WHO) as well as methods dealing with genetic effects (WHO) were mentioned as priority. It was decided that the next meeting of IAAC will review the problem and decide on methods to be developed.

REVISED DETAILED BUDGET COVERING MID-TERM FUND CONTRIBUTIONS FOR 1984

Previous Budget Schedule	FAO	WHO	UNESCO/IOC	WMO	IAEA	TOTAL 1984
10 PERSONNEL COMPONENT						
1160 <u>Personnel - Title - Grade</u>	m/m	m/m	m/m	m/m	m/m	
1161 J. J. Alfa - WHO Senior Scientist - P-5		12 72,000				72,000
1162 G. I. Gabrielides - FAO Senior Fishery Officer - P-5	12 63,000					63,000
1163 T. Barible - Maint. Engineer - P-3					12 60,000	60,000
1199 Total	63,000	72,000			60,000	195,000
1300 Administrative Support						
1301 G. Levouza - Secretary (Athens) - G-4		12 13,000				13,000
1302 Secretary (Copenhagen) - G-4		6 7,000				7,000
1303 Laboratory Assistant (Monaco) - G-5					12 28,500	28,500
1399 Total		20,000			28,500	48,500
1600 Travel on official business						
1601 Travel for technical assistance and maintenance	7,000	7,000			13,000	27,000
1602 Travel for IAAC			2,000	2,000	2,000	6,000
1699 Total	7,000	7,000	2,000	2,000	15,000	33,000
1999 Component total	70,000	99,000	2,000	2,000	103,500	276,500
20 SUB-COMMITTEE COMPONENT						
2100 <u>Sub-Committee</u>						
2101 1981 Research ^{1/}	45,000	60,000	40,000	10,000	30,000	205,000
2102 1982 Research (rephased) ^{2/}	*	*	*	*	*	*
2103 Intercalibration		20,000	10,000			30,000
2199 Total	45,000	100,000	50,000	10,000	30,000	235,000
2000 Component total	45,000	100,000	50,000	10,000	30,000	235,000
30 TRAINING COMPONENT						
3200 <u>Course training, meetings, etc.</u>						
3201 Consultation on reference methods	15,000					15,000
3202 Workshop on biogeochemical cycle of mercury	10,000					10,000
3203 Workshop on toxicity, persistence and bio-accumulation	10,000					10,000
3204 Consultation on epidemiological aspects of methylmercury		10,000				10,000
3299 Total	35,000	10,000				45,000
3999 Component total	35,000	10,000				45,000
40 EQUIPMENT COMPONENT						
4100 <u>Expendable Equipment</u>					17,000	17,000
4101 Spare parts and lab. supplies for ILMR	30,000					30,000
4102 Supplies to national collaborating centres**						
4199 Total	30,000				17,000	47,000
4200 <u>Non-Expendable Equipment</u>						
4201 Equipment supplied to national collaborating centres**	70,000			17,000		87,000
4202 Laboratory equipment for ILMR					16,000	16,000
4299 Total	70,000			17,000	16,000	103,000
4999 Component total	100,000			17,000	33,000	150,000
50 MISCELLANEOUS COMPONENT						
5100 <u>Operation & Maintenance of Equip.</u>					1,500	1,500
5200 <u>Reporting Costs</u>					1,000	1,000
5300 <u>Sundry</u>	2,000				1,000	3,000
5999 Component total	2,000				3,500	5,500
99 GRAND TOTAL	232,000	209,000	52,000	29,000	170,000	712,000

* Amounts to be inserted

** List of expendable and non-expendable equipment to be provided to FAO, WMO and IAEA by UNEP

^{1/} This line gives only indicative figures to be finalized at the XVII Meeting of IAAC

^{2/} Amounts for rephasing to be provided by Agencies in January 1984. Figures to be added to GRAND TOTAL