

UNEP/IAAC-XXI/2  
1 February 1988

Original:ENGLISH

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

Athens, 13-15 January 1988

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

UNEP/IAAC-XXI/2  
1 February 1988

Original:ENGLISH

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

Athens, 13-15 January 1988

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

## C O N T E N T S

	<u>pages</u>
Main body of report	1 - 5
Annex I : List of participants	
Annex II : Agenda	
Annex III : List of new and ongoing research proposals for 1988 and summary lists of institutes and total contributions by institute, year and country	
Annex IV : Proposed revised version of the form for the submission of research project proposals	
Annex V : Data quality assurance programme for 1988	
Annex VI : Workplan and timetable for the implementation of the Land-based Sources Protocol	
Annex VII : MAP Technical Reports Series Workplan (Until the end of June 1988)	
Annex VIII : Meetings organized by MED POL (September 1987 - December 1988)	
Annex IX : Provisional Agenda for the Scientific and Technical Committee Meeting, Athens, 23-27 May 1988	
Annex X : Extracts from "United Nations Environment Programme Manual on the design and approval of projects"	

1. The XXI IAAC Meeting was held in Athens, 13-15 January 1988. The list of participants appears in annex I.

Agenda item 1    Opening of the Meeting

2. Mr. A. Manos welcomed the participants to the Meeting and noted that the proposed re-orientation of MAP may affect the MED POL programme by giving greater emphasis to the implementation of the Protocol on Land-based Sources of pollution. He also explained that delays in payments of 1987 contributions had forced UNEP to make short-term extensions of ongoing projects, but hoped this would not affect the workplan. Finally, he noted that the newly established Scientific and Technical Committee will review MED POL, ROCC and SPA Programmes during its five-day meeting in May 1988. In view of the shorter time available, matters requiring decisions will have to be clearly identified.

3. Mr. L. Jeftic introduced the proposed agenda which was unanimously adopted (annex II).

Agenda item 2    Research

4. The committee reviewed the status of the research projects submitted for 1988. The updated list of ongoing as well as new research proposals for 1988 is attached as annex III. Annex III also contains a summary list of institutes and of total contributions by institute, by year and by country. It was agreed that all Agencies should update their lists of all closed projects since 1982 by the end of January 1988.

5. The FAO representative submitted for the committee's consideration a new modified version of the form to be used by principal investigators when submitting new research proposals (annex IV). The committee took note and agreed that any comment on the proposal would be sent to the Unit by the end of February. It was also decided that, once the form is finalized, an explanatory note on how to fill the form itself should be prepared by the Unit and attached to the form.

6. The Committee decided that a reminder for 1989 research proposals (deadline 15 September 1988) should be sent to National Co-ordinators by 15 April. The reminder should also include a note on the general policy related to the implementation of the MED POL research component and an annex highlighting the necessity for research leading to practical solutions of pollution problems and priority areas or parameters which may have been identified by specific MED POL meetings and/or recommendations on the LBS implementation. Each agency representative should prepare and send to the Unit by the end of March 1988, a half page on the above, for each activity of competence.

Agenda item 3 Monitoring

7. The participants were informed of the status of national monitoring agreements for 1987. The procedure adopted for the transmission of monitoring data received by the Unit as well as the purchase of the equipment was confirmed. On the basis of recent developments, it was agreed that the monitoring of the transport of pollution through the atmosphere should be initiated as part of the national monitoring agreements in 1989. The relevant programme description should be prepared for the Scientific and Technical Committee Meeting in May 1988.

Agenda item 4 Pilot monitoring exercises

8. The status of development of the three ongoing pilot monitoring exercises on organophosphorus compounds, organotin compounds and persistent synthetic materials was presented by the representatives of the responsible Agencies (FAO for organophosphorus and organotin compounds, IOC for persistent synthetic materials). The progress in the implementation of the three exercises was considered very satisfactory and the over-all approach was confirmed as the appropriate one whenever the need for gathering reliable data on little studied pollutants would arise. The need for introducing the three parameters in the national monitoring programmes should be considered in the future on the basis of the results of the pilot exercises.

Agenda item 5 Data collection and processing at MEDU

9. The status of the data processing at the Unit was presented by the secretariat. The committee was informed that the conversion of monitoring agreements database from Wang to PC had been completed and computerization of the reports data was underway, starting with microbiological data. The computer outputs in various forms including on-map representation were presented and circulated. It was noted that currently processing of data was by means of simple statistical analysis and presentation, but shortly data processing center would be able to carry out more complex analysis by using advanced statistical packages with the co-operation of scientists. In order to improve the processing of data, two small consultative meetings will be held.

10. In connexion with the data presentation, the status and schedule for the preparation of the forms for data reporting was discussed and the following was agreed upon:

- heavy metals, chlorinated hydrocarbons, petroleum hydrocarbons and nutrients in effluents: ready by June 1988 (WHO);
- heavy metals in seawater: interim forms ready by April 1988 (IOC/ICES);
- heavy metals and chlorinated hydrocarbons in sediments: ready by April 1988 (IAEA);
- microbial contaminants in shellfish: will be reviewed with R. Mujeriego in February 1988 (WHO);

- petroleum hydrocarbons in sediments: ready by April 1988 (IOC);
- petroleum hydrocarbons in seawater, tar on beaches, pelagic tar, oil slicks: interim forms ready (IOC);
- petroleum hydrocarbons in organisms: will be obtained from ICES (IOC);
- standard, physical and chemical parameters: preparation pending finalization of relevant reference methods (IOC, IAEA);
- all parameters relevant to airborne pollution: drafts available (WMO).

Agenda item 6 Data quality assurance

11. The representative of IAEA presented a comprehensive data quality assurance programme for 1988 relative to four countries (annex V). The programme was considered by the committee a very efficient tool which, in parallel to the ongoing intercalibration exercise, should upgrade the quality of the data in developing countries. The programme had already started being implemented in Egypt and preparations were made for its implementation in Algeria and Morocco.

Agenda item 7 Land-based Sources implementation

12. The workplan and timetable for the implementation of the Land-based Sources Protocol was reviewed by the committee. Actions taken or plans for each component are reflected in annex VI.

Agenda item 8 MAP Technical Reports Series

13. The plan for the preparation of new issues of the MAP Technical Reports Series was discussed and a list was prepared covering the period up to June 1988 (annex VII).

Agenda item 9 Meetings

14. A list of meetings covering the period September 1987 - December 1988 was prepared by the committee (annex VIII). In particular, a discussion was held on the necessary preparation for the meeting of principal investigators of monitoring programmes (12-16 December 1988). It was agreed that, once the MED POL - PHASE II monitoring data for heavy metals, chlorinated hydrocarbons and other organics are entered in the Unit's data bank, two/three consultants would be recruited to prepare a complete analysis of the validity, significance and possible use of these data. These analyses would be used as the basis of the documentation for the above mentioned meeting.

Agenda item 10 Other Contracting Parties recommendations

15. The meeting briefly reviewed other recommendations relevant to MED POL made by the last Contracting Parties Meeting and noted the actions taken.

Agenda item 11 Provisional Agenda for the Scientific and Technical Committee Meeting, Athens, 23-27 May 1988

16. The committee discussed the preparation of the Scientific and Technical Committee Meeting, Athens, 23-27 may 1988, and a provisional agenda was prepared (annex IX). As far as the preparation of the relevant documents is concerned, the following timetable was prepared:

end of January	:	List of contents of Progress Report including specific requests for inputs to be sent to all Agencies
15 February	:	All inputs from Agencies at MEDU
1 March	:	All documents to be ready in English
1 March	:	Invitation, agenda and annotated agenda to be sent out
1 April	:	All documents English and French to be sent out
end of May	:	Meeting

Agenda item 12 Project document 5102-81-01/Rev.14, and

Agenda item 13 Closing revision of 5102-81-01

17. A discussion was held on Rev.14 of 5102-81-01 and explanations were given by the secretariat on the modalities for the implementation of the activities as a result of the reduced funds. As to the necessary actions required to close project 5102-81-01 and to re-open a new project which would better reflect expanded programmes and priorities of MED POL, three explanatory notes were distributed by the secretariat extracted from the "United Nations Environment Programme Manual on the design and approval of projects" (annex X). More details would be provided to all Co-operating Agencies as soon as available from UNEP, Nairobi. It was agreed that Agencies should periodically report to MED UNIT:

- copies of all contracts and agreements (consultants and subcontracts);
- lists of all proposed allocations for research proposals;
- countries' counterpart contribution for each research agreement per year;
- list of all non-expendable equipment provided through the monitoring agreements (by item, by value, by institution, by year);
- list of all non-expendable equipment purchased for ILMR/IAEA;

- list of all spare parts purchased by IILMR;
- expendable material (value, institution, year) purchased through monitoring agreements;
- list of equipment purchased through WMO (item, value, institution, year);
- estimated cost of individual participants to meetings organized by Agencies and financed from MTF.

Agenda item 14 Other business

18. No other subjects were raised by the participants.

Agenda item 15 Adoption of the report

19. The participants adopted the report of the Meeting on 15 January 1988.

Agenda item 16. Closure of the Meeting

20. Mr. Jeftic closed the meeting at 14.00 hours on 15 January 1988.

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  
116 10 Athens  
Greece

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

UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL  
ORGANIZATION

Mr. Gunnar E.B. Kullenberg  
Senior Assistant Secretary  
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  
116 10 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 Mee  
Head  
The 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. Gunnar E.B. Kullenberg  
Senior Assistant Secretary  
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  
116 10 Athens  
Greece

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

Mr. F. Saverio Cibili  
Marine Scientist  
Co-ordinating Unit for the Mediterranean  
Action Plan  
Leoforos Vassileos Konstantinou 48  
P.O. Box 18019  
116 10 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  
116 10 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  
116 10 Athens  
Greece

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

Annex II

Agenda

1. Opening of the Meeting
2. Research
3. Monitoring
4. Pilot monitoring exercises
5. Data collection and processing at MEDU
6. Data quality assurance
7. Land-based Sources implementation
8. MAP Technical Reports Series
9. Meetings
10. Other Contracting Parties recommendations
11. Provisional Agenda for the Scientific and Technical Committee Meeting,  
Athens, 23-27 May 1988
12. Project document 5102-81-01/Rev. 14
13. Closing revision of 5102-81-01
14. Other business
15. Adoption of the report
16. Closure of the meeting

**Annex III**

**List of new and ongoing research proposals for 1988  
and summary lists of institutes and of  
total contributions by institute, by year and by country**

RESEARCH PROJECTS IN THE FRAMEWORK OF MED POL  
ONGOING (FAO)  
AS AT 01-02-1988

FAO ALG- 6-J A. BAKALEM	82:
INSTITUT DES SCIENCES DE LA MER ET DE L'AMENAGEMENT DU LITTORAL (ISMAL), ALGER	83:
	ISMAL 84:
EFFETS DES POLLUTIONS THERMIQUES SUR LES ORGANISMES ET ECOSYSTEMES COTIERES	85:
	86: 3000
	87: 3000
	88:EXT
FAO ALG- 8-I R. SEMROUD	82:
INSTITUT DES SCIENCES DE LA NATURE, U.S.T.H.B., ALGER	83:
	USTHB 84:
MODIFICATIONS DES ECOSYSTEMES PAR LA POLLUTION	85:
	86:
	87:
	88: 4000
FAO ALG- 9-H F. L. SAMSON	82:
INSTITUT DES SCIENCES DE LA NATURE, U.S.T.H.B., ALGER	83:
	USTHB 84:
EUTROPHISATION ET FLORAISONS CONCOMITANTES DE PLANCTON	85:
	86:
	87:
	88: 4000
FAO CYP- 2-G M. HADJICHRISTOPHOROU	82:
FISHERIES DEPARTMENT, MINISTRY OF AGRICULTURE, NICOSIA	83:
	MAGNI 84:
EFFECTS OF TURBIDITY AND BLANKETING OF GYPSUM ON LITTORAL AND SUBLITTORAL MARINE ORGANISMS	85:
	86: 3000
	87:NIL
	88:EXT
FAO EGY- 13-G R. R. ABOALLA	82:
INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	83:
	IOFAL 84:
EFFECT OF LAND DRAINAGE AND INDUSTRIAL WASTES ON ALGAE IN ABU QIR AND MEX SAYS	85:
	86:
	87:
	88: 4000
FAO FRA- 24-G C. CHASSARD-BOUCHAUD	82:
UNIVERSITE P. ET M. CURIE, LABORATOIRE DE BIOLOGIE, PARIS	83:
	UCULB 84:
TOXICITE, PERSISTANCE ET BIOACCUMULATION DU CHROME DANS UNE CHAINE TROPHIQUE D'ORGANISMES MARINS COMESTIBLES. ASPECTS STRUCTURAUX ULTRA STRUCTURAUX ET MICROANALYTIQUES	85:
	86: 3000
	87:NIL
	88:EXT
FAO FRA- 28-G N. VICENTE	82:
CENTRE D'ETUDE DES RESSOURCES ANIMALES MARINES, ST.JEROME, MARSEILLE	83:
	CERAM 84:
EFFETS D'ELEMENTS METALLIQUES (ZN, CU, PB) SUR L'OURSIN COMESTIBLE SOUMIS AUX REJETS URBAINS (MARSEILLE - TOULON) - EXPERIENCES IN VITRO AVEC LE PLOMBE	85:
	86:NAC
	87:
	88: 4000
FAO FRA- 29-G J. BRUSLE	82:
LABORATOIRE DE BIOLOGIE MARINE, UNIVERSITE DE PERPIGNAN, PERPIGNAN	83:
	UPEBM 84:
EXPERIMENTALE DE L'EFFET DU CADMIUM SUR LES JUVENILES (CIVELLES ET ANGUilletTES) DE L'ANGUILLE EUROPEENNE ANGUILLA ANGUILLA	85:
	86: 4000
	87: 3000
	88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

FAO FRA- 37-I J. GOY	82:
ICHTYOLOGIE GENERALE ET APPLIQUEE, MUSEUM NATIONAL D'HISTOIRE NATURELLE, PARIS	83:
	MNHNP 84:
EVOLUTION DE L'ECOSYSTEME PELAGIQUE DEPUIS LE DEBUT DU SIECLE EN MER LIGURE,	85:
MODELISATION DE SON FONCTIONNEMENT EN MILIEUX NATUREL ET PERTURBE	86:
	87: 3500
	88:EXT
FAO FRA- 39-G C. CHASSARD-BOUCHAUD	82:
UNIVERSITE P. ET M. CURIE, LABORATOIRE DE BIOLOGIE, PARIS	83:
	UCULB 84:
ETUDE DE LA BIOACCUMULATION, DE LA PERSISTANCE ET DE LA TOXICITE DE L'URANIUM	85:
ET DU PLUTONIUM CHEZ DES ORGANISMES MARINS MEDITERRANEENS CONSOMMES PAR L'HOMME	86:
	87:
	88: 4000
FAO FRA- 40-K M. ROMEO	82:
I.N.S.E.R.M., UNITE 303 "MER ET SANTE", VILLEFRANCHE-SUR-MER	83:
	INSEM 84:
IMPORTANCE DU MACROPLANCTON GELATINEUX DANS LE STOCKAGE ET LE TRANSFERT DE	85:
METAUX POLLUANTS (CADMIUM, CUIVRE, PLOMB ET ZINC) EN MEDITERRANEE NORD-	86:
OCCIDENTALE	87:
	88: 4000
FAO FRA- 41-I P. BERNARD	82:
INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE	83:
	INSER 84:
IMPACT DE LA POLLUTION (CHIMIQUE ET BACTERIOLOGIQUE) SUR LA PHYSIOLOGIE ET LA	85:
COMPOSITION CHIMIQUE DE POSIDONIA OCEANICA	86:
	87:
	88: 3500
FAO GRE- 31-G S. E. PAPOUTSOGLOU	82:
DEPT. OF APPLIED HYDROBIOLOGY, AGRICULTURAL UNIVERSITY COLLEGE OF ATHENS	83:
	UATAG 84:
EFFECT OF CADMIUM AND OTHER POLLUTANTS ON THE SURVIVAL, GROWTH RATE AND	85: 4500
REPRODUCTION OF COMMERCIALLY CULTURED MARINE AND BRACKISH WATER FISH OF THE	86: 3000
MEDITERRANEAN	87: 3000
	88:EXT
FAO GRE- 34-G A. NICOLAIDOU	82:
ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS	83:
	VATZO 84:
IDENTIFICATION OF BIOLOGICAL INDICATORS OF HEAVY METALS AT THE SITE OF A	85:
SMEILING FACTORY IN LARYMNA, GREECE	86: 3000
	87: 3000
	88:EXT
FAO GRE- 49-G J. CASTRITSI-CATHARIOS	82:
ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS	83:
	UATZO 84:
ETUDE DE LA TOXICITE AIGUE ET DES EFFETS SUBLETAUX DES COMPOSANTS D'ORGANOTINE	85:
SUR LES NAUPLII D'ARTEMIA SALINHA DE MESSOLONGHI, GRECE	86:NAC
	87: 3000
	88:EXT
FAO GRE- 59-G X. G. KONDAKIS	82:
PUBLIC HEALTH LABORATORY, UNIVERSITY OF PATRAS, PATRAS	83:
	UPPHL 84:
ACCUMULATION OF ORGANOPHOSPHORUS COMPOUNDS AND METALS IN AQUATIC ORGANISMS OF	85:
A SALT-WATER LAGOON POLLUTED BY PESTICIDES (KOTYCHI)	86:
	87:
	88: 4000

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED    NAC: NOT ACCEPTED    UND: UNDER NEGOTIATION    WIT: WITHDRAWN    NIL: NO ASSISTANCE  
 ACHEVE            NON ACCEPTE            EN COURS DE NEGOC.       RETIRE            PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

-----  
FAO GRE- 61-H N. S. MARGARIS 82:  
DEPARTMENT OF ENVIRONMENT, UNIVERSITY OF THE AEGEAN, KOS 83:  
MODERN AGRICULTURAL PRACTICES AND THE EUTROPHICATION IN THE PAGASSITIKOS GULF UAGDE 84:  
85:  
86:  
87:  
88: 4000

-----  
FAO GRE- 62-K K. FYTIANOS 82:  
CHEMISTRY DEPARTMENT, ARISTOTELIAN UNIVERSITY OF THESSALONIKI, THESSALONIKI 83:  
STUDY OF BIOGEOCHEMICAL CYCLE OF ORGANOPHOSPHORUS PESTICIDES IN THERMAIKOS UTHCD 84:  
GULF, GREECE 85:  
86:  
87:  
88: 4000

-----  
FAO ISR- 15-G Y. ACHITUV 82:  
DEPT. OF LIFE SCIENCES, BAR-ILAN UNIVERSITY, RAMAT-GAN 83:  
THE INFLUENCE OF POLLUTION BY HEAVY METALS ON VARIOUS PHYSIOLOGICAL ASPECTS AND UBIRG 84:  
ENERGY BUDGET OF DONAX TRUNCULUS (BIVALVIA), MASSARIUS CIRCUMCINCTA AND 85: 5000  
N. GIBBOLOSA (GASTROPODS) 86: 3000  
87: 3000  
88:EXT

-----  
FAO ISR- 17-A D. WYNNE 82:  
THE KINNERET LIMNOLOGICAL LABORATORY, TIBERIAS 83:  
ORGANOPHOSPHORUS COMPOUNDS IN THE MARINE ENVIRONMENT - FISH KINNE 84:  
85:  
86: 3000  
87: 3000  
88:EXT

-----  
FAO ISR- 24-I B. S. GALIL 82:  
DEPT OF ZOOLOGY, TEL AVIV UNIVERSITY, TEL AVIV 83:  
POLLUTION INDUCED MODIFICATIONS IN THE COMPOSITION AND DIVERSITY OF PLANKTONIC UTADZ 84:  
LARVAL DECAPODA OFF THE MEDITERRANEAN COAST OF ISRAEL 85:  
86:  
87: 3000  
88:EXT

-----  
FAO ITA- 52-D A. RENZONI 82:  
DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA 83:  
EVALUATION OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS: SEAFOOD ANALYSES USIBA 84:  
85: 3000  
86: 2000  
87:NIL  
88: 2000

-----  
FAO ITA- 64-G V. ALBERGONI 82:  
DIPARTIMENTO DI BIOLOGIA, UNIVERSITA DI PADOVA, PADOVA 83:  
BIDACCUMULATION STUDIES AND PHYSIOLOGICAL AND BIOCHEMICAL RESPONSES IN MARINE UPD8A 84:  
ORGANISMS EXPOSED TO HEAVY METALS AND POLYCHLORINATED BIPHENYLS 85:  
86: 3000  
87: 3000  
88:EXT

-----  
FAO ITA- 65-G L. DALLA VENEZIA 82:  
ISTITUTO DI BIOLOGIA DEL MARE, CNR, VENEZIA 83:  
STUDY OF OSMOREGULATION MECHANISMS IN MARINE INVERTEBRATES UNDER POLLUTION IBMVE 84:  
CONDITIONS 85:  
86:NIL  
87: 2500  
88:EXT

-----  
THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

FAO ITA- 68-K E. BACCI DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA	82: 83: USIBA 84: 85: 86: 3000 87: 4000 88:EXT
ENVIRONMENTAL DISTRIBUTION AND FATE OF ORGANOTIN COMPOUNDS (MAINLY BUTYLTIN AND METHYLTIN SPECIES) WITH PARTICULAR ATTENTION TO THE MARINE ENVIRONMENT	82: 83: USIBA 84: 85: 86: 87: 88:EXT
FAO ITA- 69-K F. BALDI DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA	82: 83: USIBA 84: 85: 86: 3000 87: 3000 88:EXT
ISOLATION AND ASSESSMENT OF BACTERIA WHICH TRANSFORM THE INORGANIC AND ORGANIC FORMS OF MERCURY IN THE MARINE ENVIRONMENT: METHOD TO EVALUATE THE BIOTRANSFORMING FEATURES OF MERCURY RESISTANT BACTERIA	82: 83: USIBA 84: 85: 86: 87: 88:EXT
FAO ITA- 81-H L. ROTTINI-SANDRINI LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 3000 88:EXT
PERIODICITY AND CAUSES OF IRREGULAR MACRO-AND MICRO-PLANKTON BLOOMS APPEARING IN EUTROPHICATED AREAS IN NORTHERN ADRIATIC AND GULF OF TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 3000 88:EXT
FAO ITA- 83-G R. CAPELLI ISTITUTO DI CHIMICA GENERALE, UNIVERSITA DI GENOVA, GENOVA	82: 83: UGECG 84: 85: 86: 87: 3000 88:EXT
TIN, ORGANOTIN COMPOUNDS AND THALLIUM IN MARINE ORGANISMS	82: 83: 84: 85: 86: 87: 88:EXT
FAO ITA- 93-H F. BOERO BIOLOGY DEPARTMENT, UNIVERSITY OF LECCE, LECCE	82: 83: ULEBD 84: 85: 86: 87: 3000 88:EXT
ACTIVITY, BEHAVIOUR AND DIET OF JELLYFISH ALONG THE LIGURIAN COAST	82: 83: 84: 85: 86: 87: 88:EXT
FAO ITA- 94-I G. BRESSAN LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE	82: 83: CIMAM 84: 85: 86: 87: 3000 88:EXT
MONITORAGE DES PHANEROGAMES MARINES DU GOLFE DE TRIESTE: ANALYSE DES VARIATIONS DE L'ECOSYSTEME	82: 83: 84: 85: 86: 87: 88:EXT
FAO ITA- 96-K E. TARAMELLI-RIVOSECCHI ISTITUTO DI ZOOLOGIA, UNIVERSITA DI ROMA "LA SAPIENZA", ROMA	82: 83: UROSA 84: 85: 86: 87: 3000 88:EXT
CADMIUM IN WATER, SEDIMENTS AND BENTHIC ORGANISMS FROM A STRETCH OF COAST FACING THE THERMOELECTRIC POWER STATION AT TORVALDALIGA	82: 83: 84: 85: 86: 87: 88:EXT
FAO ITA- 97-G C. BARGHIGIANI CENTRO INTERUNIVERSITARIO DI BIOLOGIA MARINA, LIVORNO	82: 83: CIBML 84: 85: 86: 87: 3000 88:EXT
MERCURY PRESENCE IN BENTHIC ORGANISMS OF THE NORTHERN TYRRHENIAN SEA IN RELATION TO THE CINNABAR ANOMALY OF MOUNT AMIATA	82: 83: 84: 85: 86: 87: 88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

FAO ITA-104-K R. FERRARA 82:  
CENTRO INTERUNIVERSITARIO DI BIOLOGIA MARINA, LIVORNO 83:  
CIBML 84:  
ROLE OF POSIDONIA OCEANICA (L.), DELILE PRAIRIES ON BIOAVAILABILITY OF MERCURY 85:  
IN MARINE ENVIRONMENT 86:  
87: 3500  
88:EXT

FAO LEB- 3-I S. H. LAKKIS 82:  
MARINE RESEARCH CENTRE, BEIRUT 83:  
MRCBE 84:  
POLLUTION-INDUCED ECOSYSTEMS MODIFICATIONS: SURVEY ON ICHTHYOPLANKTON ALONG THE 85:  
COAST OF LEBANON PARTICULARLY IN POLLUTED ZONES 86: 3000  
87: 3000  
88:EXT

FAO MAL- 4-G V. AXIAK 82:  
BIOLOGY SECTION, MATHS AND SCIENCES DEPT., UNIVERSITY OF MALTA 83:  
UMLBS 84:  
AN INVESTIGATION ON THE BIOLOGICAL RESPONSES TO THE ORGANOPHOSPORUS PESTICIDES 85:  
OF SELECTED MARINE INVERTEBRATES 86: 3000  
87: 3000  
88:EXT

FAO MOR- 2-G M. KESSABI 82:  
INSTITUT NATIONAL AGRONOMIQUE ET VETERINAIRE, RABAT 83:  
INAVR 84:  
RECHERCHE SUR LA TOXICITE, LA PERSISTANCE ET LA BIOACCUMULATION DES CERTAINS 85: 5000  
POLLUANTS 86: 2000  
87: 3500  
88:EXT

FAO SPA- 13-G J. MEDINA ESCRICHÉ 82:  
UNIVERSITY COLLEGE OF CASTELLON, UNIVERSITY OF VALENCIA, VALENCIA 83:  
UVAVC 84:  
STUDY OF THE TOXICITY, BIOACCUMULATION AND PERSISTENCE OF SOME HEAVY METALS AND 85: 4000  
PESTICIDES IN THE CRAYFISH PROCAMBARUS CLARKII (GIRARD) ON THE ALBUFERA LAKE 86: 3000  
OF VALENCIA (SPAIN) 87: 3000  
88:EXT

FAO SPA- 20-G B. MORALES-NIN 82:  
INSTITUTO DE CIENCIAS DEL MAR, BARCELONA 83:  
ICMBA 84:  
LIFE HISTORY PATTERNS OF MEDITERRANEAN BLUEFIN TUNA 85:  
86: 3000  
87: 3000  
88:EXT

FAO TUR- 20-A T. I. BALKAS 82:  
DEPT. OF ENVIRONMENTAL ENGINEERING, MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA 83:  
UMETA 84:  
DEVELOPMENT OF METHODOLOGY FOR THE DETERMINATION OF ORGANOTIN COMPOUNDS 85:  
86:  
87:  
88: 4500

FAO YUG- 43-H I. MARASOVIC 82:  
INSTITUTE OF OCEANOGRAPHY AND FISHERIES, SPLIT 83:  
IOFSP 84:  
STUDIES OF TOXIC DINOFLAGELLATE SPECIES IN THE INSHORE WATERS OF THE EAST 85: 3000  
ADRIATIC COAST 86: 3000  
87: 3000  
88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

FAO YUG- 47-G N. FANUKO MARINE RESEARCH AND TRAINING CENTRE, PIRAN	82: 83: MRTCP 84: TOXICITY OF CADMIUM, MERCURY AND PCB'S TO THE REPRESENTATIVE NORTHERN-ADRIATIC PHYTOPLANKTON SPECIES CULTURED IN VITRO	85: 4000 86:NIL 87: 3000 88:EXT
FAO YUG- 49-K T. ZVONARIC INSTITUTE OF OCEANOGRAPHY AND FISHERIES, SPLIT	82: 83: IOFSP 84: STUDY OF THE MERCURY ECOCYCLE IN THE MARINE SYSTEM OF THE KASTELA BAY	85: 4500 86: 3000 87: 3000 88:EXT
FAO YUG- 53-G M. OZRETIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: SERUM ENZYMES IN FISH AS BIOCHEMICAL INDICATORS OF MARINE POLLUTION	85: 5000 86:NIL 87: 3000 88:EXT
FAO YUG- 57-G C. LUCU CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: INTERACTION OF METAL POLLUTANTS WITH GILL EPITHELIA OF MARINE ORGANISMS. TRANSPORT AND EFFECTS	85: 86: 87: 3000 88:EXT
FAO YUG- 64-K M. BRANICA CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: BIOGEOCHEMICAL CYCLE OF MERCURY SPECIES IN THE MARINE ENVIRONMENT	85: 86: 3000 87: 4000 88:EXT
FAO YUG- 70-G B. OZRETIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: DEVELOPMENT OF SHORT-TERM TOXICITY TESTS: THE USE OF SEA URCHIN GAMETES AND THEIR DEVELOPMENTAL STAGES	85: 86: 3000 87: 3000 88:EXT
FAO YUG- 72-G J. PAVICIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: METAL-BINDING PROTEINS SIMILAR TO METALLOTHIONEINS AS A POTENTIAL INDICATOR OF METAL POLLUTION	85: 86: 87: 3000 88:EXT
FAO YUG- 76-I A. Z. LOVRIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: ECOLOGICAL MAPPING OF PHYTO-INDICATORS OF COASTAL POLLUTION INDUCED DEGRADATION ALONG THE EAST ADRIATIC COAST, ISLANDS AND ESTUARIES	85: 86: 87: 3000 88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

---

FAO YUG- 82-H T. LEGOVIC	82:
CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	83:
LONG-TERM EUTROPHICATION OF THE NORTHERN ADRIATIC SEA: EVIDENCE AND CONTROL	CMRZA 84:
	85:
	86:
	87:
	88: 4000
FAO YUG- 87-H V. ZUTIC	82:
CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	83:
EUTROPHICATION PROCESSES IN THE KRKA ESTUARY (ADRIATIC SEA)	CMRZA 84:
	85:
	86:
	87:
	88: 4000

---

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

## RESEARCH PROPOSALS SUBMITTED FOR 1988

FAO

AS AT 01-02-1988

FAO EGY- 15-G S. A. SOLIMAN	82:
FACULTY OF AGRICULTURE, UNIVERSITY OF ALEXANDRIA, ALEXANDRIA	83:
	VALFA 84:
BIOCONCENTRATION OF ORGANIC AND INORGANIC POLLUTANTS IN THE MEDITERRANEAN SEA BY DIFFERENT AQUATIC ORGANISMS	85: 86: 87: 88:UND
FAO FRA- 42-G M. LAFaurie	82:
FACULTE DE MEDECINE, UNIVERSITE DE NICE, NICE	83:
	UNIFM 84:
ACTIVITES DE SYSTEMES DE BIOPROTECTION D'ORGANISMES MARINS REPRESENTATIFS D'ECOSYSTEMES COTIERS EN MER MEDITERRANEE	85: 86: 87: 88:UND
FAO GRE- 55-G A. A. HARITOS	82:
ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS	83:
	UATZO 84:
STUDY OF QUALITATIVE AND QUANTITATIVE EFFECTS OF SELENIUM, ARSENIC AND CHROMIUM ON PEPTIDES AND PROTEINS OF CRUSTACEANS BY HIGH PERFORMANCE LIQUID CHROMATO- GRAPHY AND ELECTROPHORETIC TECHNIQUES	85: 86: 87: 88:UND
FAO ITA- 78-D M. CRESCENTI	82:
DEPARTMENT OF ANIMAL BIOLOGY, UNIVERSITY OF MESSINA, MESSINA	83:
	UMSAB 84:
INVESTIGATION ON THE METHYLMERCURY OCCURRING IN LEPIDOPUSCAUDATUS EUPHRASEN COMING FROM THE MESSINA STRAITS	85: 86:UND 87:UND 88:UND
FAO ITA-111-H A. CARLI	82:
ISTITUTO DI SCIENZE AMBIENTALI MARINE, UNIVERSITA DI GENOVA, GENOVA	83:
	UGEAM 84:
STUDY OF PLANKTON POPULATIONS IN A LIGURIAN SEA ZONE, RELATING TO THE EUTROPHICATION STATE OF THE WATER	85: 86: 87: 88:UND
FAO TUN- 5-H M. BELKHIR	82:
INSTP, SALAMMO	83:
	INSTP 84:
BIOLOGIE DES EAUX DECOLOREES	85: 86: 87:UND 88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

RESEARCH PROJECTS IN THE FRAMEWORK OF MED POL  
ONGOING (WHO)  
AS AT 01-02-1988

WHO FRA- 16-K P. BERNARD	82:
INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE	83:
	INSER 84:
RECHERCHE DE DERMATOPHYTES ET MOISISSURES PATHOGENES DANS LE SABLE DES ZONES	85:
MARINES A VOCATION BALNEAIRE PAR METHODE DE FILTRATION SUR MEMBRANES ET	86: 3500
SENSIBILITE DES DERMATOPHYTES ISOLES VIS-A-VIS DE CERTAINS ANTIFONGI	87:NIL
	88:EXT
WHO FRA- 17-K M. GAUTHIER	82:
INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE	83:
	INSER 84:
ADAPTATION DES ENTEROBACTERIES PATHOGENES A L'EAU DE MER	85:
	86: 3500
	87: 3000
	88:EXT
WHO FRA- 34-K Y. MARTIN	82:
DEPARTEMENT RECHERCHE, FONDATION OCEANOGRAPHIQUE RICARD, SIX FOURLS LES PLAGES	83:
	FORSF 84:
APPORTS PAR LES EFFLUENTS URBAINS ET CAPACITE DE SURVIE DANS LE MILIEU MARIN DE	85:
CERTAINS MICROORGANISMES PATHOGENES	86: 3500
	87: 3000
	88:EXT
WHO FRA- 36-G M. LAFOURIE	82:
FACULTE DE MEDECINE, UNIVERSITE DE NICE, NICE	83:
	UNIFM 84:
ABSORPTION DES XENOBIOTIQUES BIOTRANSFORMATION ET TUMOROGENESE CHEZ LES POISSONS	85:
MARINS	86: 3500
	87:NIL
	88:EXT
WHO GRE- 13-D J. A. PAPADAKIS	82:
ATHENS SCHOOL OF HYGIENE, ATHENS	83:
	ASHAT 84: 4500
INVESTIGATION FOR NEUROTOXINS IN SHELLFISH OF ELEFSIS AND SARONICOS GULFS	85: 4500
	86:NIL
	87: 4000
	88:EXT
WHO GRE- 29-D S. NAKOU	82:
INSTITUTE OF CHILD HEALTH, AGHIA SOPHIA CHILDREN'S HOSPITAL, ATHENS	83:
	AGHAT 84: 3500
BIOLOGICAL MONITORING OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS:	85: 3500
SAMPLING OF HUMAN HAIR	86:NIL
	87:NIL
	88:EXT
WHO GRE- 30-D A. TRICHOPOULOU	82:
ATHENS SCHOOL OF HYGIENE, ATHENS	83:
	ASHAT 84: 5000
BIOLOGICAL MONITORING OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS:	85: 5000
DIETARY SURVEY	86:NIL
	87:NIL
	88:EXT
WHO GRE- 47-E J. GANOLULIS	82:
SCHOOL OF TECHNOLOGY, ARISTOTELIAN UNIVERSITY OF THESSALONIKI, THESSALONIKI	83:
	UTHST 84:
DEVELOPMENT OF GUIDELINES FOR THE DESIGN OF SUBMARINE OUTFALLS IN THE	85:
MEDITERANEAN	86: 4000
	87: 3500
	88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

-----

WHO GRE- 52-K V. KRIKELIS  
T.E.I., DEPT. OF VIROLOGY, LARISSA  
INACTIVATION OF VIRUSES IN AQUATIC ENVIRONMENTS

TEILA 82:  
83:  
84:  
85:  
86:  
87: 4000  
88:EXT

-----

WHO GRE- 53-A A. V. MARCELOU-KINTI/J.A. PAPADAKIS  
ATHENS SCHOOL OF HYGIENE, ATHENS  
A STUDY ON THE COMPARATIVE DISTRIBUTION OF MICROBIAL AND YEAST POPULATIONS IN SAND AND SEAWATER

ASHAT 82:  
83:  
84:  
85:  
86:  
87: 4000  
88:EXT

-----

WHO GRE- 54-D P. VLACHOS  
POISON CONTROL CENTRE, CHILDREN'S HOSPITAL "P.A.KYRIAKOU", ATHENS  
DERMAL DISEASES IN SEA SWIMMERS

KYHAT 82:  
83:  
84:  
85:  
86:  
87: 2500  
88:EXT

-----

WHO ISR- 16-D B. FATTAL  
ENVIRONMENTAL HEALTH LABORATORY, HEBREW UNIVERSITY, JERUSALEM  
EPIDEMIOLOGICAL STUDY OF MORBIDITY AND VIRAL ANTIBODIES AMONG BATHERS EXPOSED TO MICROBIAL POLLUTION OF SEAWATER

UHBEH 82:  
83:  
84:  
85: 10000  
86:NIL  
87: 6000  
88:EXT

-----

WHO ISR- 19-G H. RAV-ACHA  
SCHOOL OF APPLIED SCIENCES AND TECHNOLOGY, THE HEBREW UNIVERSITY, JERUSALEM  
MUTAGENICITY OF CHLORINATED SEAWATER FROM POWER PLANTS COOLING SYSTEMS

UHBAS 82:  
83:  
84:  
85:  
86: 3000  
87:NIL  
88:EXT

-----

WHO ISR- 23-A A. MATES  
PUBLIC HEALTH LABORATORY, MINISTRY OF HEALTH, HAIFA  
A SIMPLE RAPID METHOD FOR ENUMERATION OF E. COLI IN SEAWATER

MHHAI 82:  
83:  
84:  
85:  
86:  
87: 3000  
88:EXT

-----

WHO ITA- 53-D A. RENZONI  
DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA  
EVALUATION OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS: SAMPLING OF HUMAN HAIR

USIBA 82:  
83:  
84: 3500  
85: 3500  
86:NIL  
87:NIL  
88:EXT

-----

WHO ITA- 54-D A. RENZONI  
DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA  
BIOLOGICAL MONITORING OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS: DIETARY SURVEY

USIBA 82:  
83:  
84: 5000  
85: 5000  
86:NIL  
87:NIL  
88:EXT

-----

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

-----  
WHO ITA- 59-C L. VOLTERRA  
ISTITUTO SUPERIORE DI SANITA, ROMA 82:  
83:  
ISUPR 84:  
HYGIENIC QUALITY OF SHELLFISH: MICROBIOLOGICAL INDICATORS OF POLLUTION 85:  
VERSUS OTHER MICROBIOLOGICAL PARAMETERS 86: 3000  
87: 3000  
88:EXT  
-----  
WHO ITA- 66-G S. DE FLORA  
ISTITUTO DI IGIENE, UNIVERSITA DI GENOVA, GENOVA 82:  
83:  
UGEII 84:  
MUTAGENICITY OF CHEMICAL COMPOUNDS IN THE MARINE ENVIRONMENT 85:  
86: 3000  
87: 2500  
88:EXT  
-----  
WHO ITA- 79-G G. P. DE RENZI  
FACOLTA DI MEDICINA, UNIVERSITA DI ROMA, ROMA 82:  
83:  
UROFM 84:  
CORRELATION BETWEEN MARINE POLLUTANTS AND DEGENERATIVE DISEASE 85:  
86: 3000  
87:NIL  
88:EXT  
-----  
WHO ITA- 80-G G. L. BRONZETTI  
ISTITUTO DI MUTAGENESI E DIFFERENZIAMENTO DEL CNR, PISA 82:  
83:  
CNRPI 84:  
SHORT TERM TEST IN THE MUTAGENIC AND CARCINOGENIC DETECTION OF SEAWATER 85:  
POLLUTANTS 86: 3000  
87:NIL  
88:EXT  
-----  
WHO ITA- 82-D A. CARLI  
ISTITUTO DI SCIENZE AMBIENTALI MARINE, UNIVERSITA DI GENOVA, GENOVA 82:  
83:  
UGEAM 84:  
ECOLOGICAL AND MEDICAL ASPECTS OF JELLYFISH 85:  
86:  
87: 2000  
88:EXT  
-----  
WHO ITA- 84-C M. V. TORREGROSSA  
ISTITUTO DI IGIENE, UNIVERSITA DI PALERMO, PALERMO 82:  
83:  
UPLII 84:  
BACTERIAL AND CHEMICAL INDICATORS OF COASTAL WATERS POLLUTION OF HUMAN ORIGIN 85:  
86:  
87: 4000  
88:EXT  
-----  
WHO ITA- 88-E G. A. ZAPPONI  
ISTITUTO SUPERIORE DI SANITA, ROMA 82:  
83:  
ISUPR 84:  
THE HEALTH COMPONENT OF ENVIRONMENTAL IMPACT ASSESSMENT - EIA OF SELECTED 85:  
PROJECTS AND DEVELOPMENTS IN THE MEDITERRANEAN COASTAL AREAS 86:  
87: 5000  
88:EXT  
-----  
WHO LIB- 1-A A. F. BOARGOB  
ENVIRONMENTAL PROTECTION PROGRAMME, SECRETARIAT OF SCIENTIFIC RESEARCH, TRIPOLI 82:  
83:  
EPPTR 84:  
ASSESSMENT OF MICROBIOLOGICAL POLLUTION IN BATHING SEAWATER IN TRIPOLI 85:  
86: 3000  
87:NIL  
88:EXT  
-----

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

WHO LIB- 3-E S. OMAR TUMI PETROLEUM RESEARCH CENTRE, TRIPOLI	82: 83: PRCTR 84: 85: 86: 4000 87:NIL 88:EXT
ASSESSMENT OF WASTE OIL IN SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA	
WHO SPA- 6-K P. ROMERO RAYA FACULTY OF SCIENCE, DEPT. OF MICROBIOLOGY, UNIVERSITY OF MALAGA, MALAGA	82: 83: UMGOM 84: 4500 85: 4500 86:NIL 87: 3000 88:EXT
STUDIES ON SURVIVAL OF PATHOGENIC MICROORGANISMS IN SEAWATER	
WHO SPA- 17-A J. JOFRE TORROELLA FACULTAD DE BIOLOGIA, UNIVERSIDAD DE BARCELONA, BARCELONA	82: 83: UBAfp 84: 85: 2500 86: 4000 87: 3000 88:EXT
BACTERIOPHAGES OF BACTEROIDES AS INDICATORS OF PATHOGENIC HUMAN VIRUSES IN COASTAL SEAWATERS	
WHO TUR- 14-B S. SOYUPAK DEPT. OF ENVIRONMENTAL ENGINEERING, MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA	82: 83: UMETA 84: 85: 86: 4000 87: 3500 88:EXT
DEVELOPMENT OF APPROACHES FOR THE CONTINUOUS ASSESSMENT OF POLLUTANT LOADS	
WHO TUR- 15-C Y. F. OZTURK DEPT. OF ENVIRONMENTAL ENGINEERING, MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA	82: 83: UMETA 84: 85: 86: 4000 87:NIL 88:EXT
FORMULATION OF SCIENTIFIC RATIONALE FOR EMISSION STANDARDS OF SELECTED POLLUTANTS	
WHO TUR- 18-D G. KOCASOY BOGAZICI UNIVERSITY, FACULTY OF ENGINEERING, POLL.CONTROL RESEARCH GROUP, ISTANBUL	82: 83: UBOEP 84: 85: 86: 87: 3500 88:EXT
EFFECT OF TOURISM ON COASTAL POLLUTION	
WHO TUR- 19-E K. CURI BOGAZICI UNIVERSITY, FACULTY OF ENGINEERING, POLL.CONTROL RESEARCH GROUP, ISTANBUL	82: 83: UBOEP 84: 85: 86: 87: 3500 88:EXT
COASTAL POLLUTION DUE TO SOLID WASTES AND ITS CONTROL BY PROPER DISPOSAL, RECYCLING AND REUSE	
WHO YUG- 14-G B. KURELEC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 5000 85: 5000 86:NIL 87: 3000 88:EXT
THE CORRELATION BETWEEN LEVELS AND EFFECTS OF MUTAGENIC POLLUTANTS IN THE MARINE ENVIRONMENT	

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

WHO YUG- 27-D R. BUZINA INSTITUTE OF PUBLIC HEALTH OF SR CROATIA, ZAGREB EVALUATION OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS AND RELATED HEALTH HAZARDS	82: 83: 8000 IPHZA 84: 6000 85: 5000 86:NIL 87:NIL 88:EXT
WHO YUG- 63-C V. PRAVDIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB DEVELOPMENT OF MODELS FOR CALCULATION OF ENVIRONMENTAL CAPACITY OF SEAWATER IN THE MEDITERRANEAN	82: 83: CMRZA 84: 85: 86: 3500 87: 3000 88:EXT
WHO YUG- 71-G R. BATEL CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ GENOTOXIC RISK ASSESSMENT IN THE MARINE ENVIRONMENT USING INVERTEBRATES AS INDICATOR ORGANISMS	82: 83: CMRRO 84: 85: 86: 87: 3000 88:EXT
WHO YUG- 79-D P. STEGNAR INSTITUTE JOSEF STEFAN, UNIVERSITY E. KARDELJ, LJUBLJANA ANALYSIS OF HUMAN HAIR AND OTHER TISSUES ON BEHALF OF INSTITUTIONS PARTICIPATING IN MEDITERRANEAN METHYLMERCURY PROJECT	82: 83: IJSLJ 84: 85: 8000 86: 6000 87: 5000 88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

## RESEARCH PROPOSALS SUBMITTED FOR 1988

WHO

AS AT 01-02-1988

WHO	EGY- 10-C F. EL-SHARKAWI HIGH INSTITUTE OF PUBLIC HEALTH, ALEXANDRIA	82: 83: HIPHA 84: 85: 86:UND 87:UND 88:UND
WHO	EGY- 11-E F. EL-SHARKAWI HIGH INSTITUTE OF PUBLIC HEALTH, ALEXANDRIA	82: 83: HIPHA 84: 85: 86:UND 87:UND 88:UND
WHO	EGY- 17-D R. B. NESSIM INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: IOFAL 84: 85: 86: 87: 88:UND
WHO	EGY- 44-K M. J. GAUTHIER INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE	82: 83: INSER 84: 85: 86: 87: 88:UND
WHO	FRA- 57-K V. KRIKELIS MUNICIPAL WATER SEWAGE COMPANY OF LARISSA (DEYAL), LARISSA	82: 83: MNSLA 84: 85: 86: 87: 88:UND
WHO	GRE- 58-D M. PAPAPETROPOULOU PUBLIC HEALTH LABORATORY, UNIVERSITY OF PATRAS, PATRAS	82: 83: UPPHL 84: 85: 86: 87: 88:UND
WHO	GRE- 60-K G. PAPAEVANGELOU DEPARTMENT OF MEDECINE, ARISTOTELIAN UNIVERSITY OF THESSALONIKI, THESSALONIKI	82: 83: UTHDM 84: 85: 86: 87: 88:UND
WHO	ISR- 25-A A. MATES PUBLIC HEALTH LABORATORY, MINISTRY OF HEALTH, HAIFA	82: 83: MHAI 84: 85: 86: 87: 88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

WHO ISR- 27-G E. NEVO INSTITUTE OF EVOLUTION, UNIVERSITY OF HAIFA	82: 83: UHAIE 84: 85: 86: 87: 88:UND
THE EFFECTS OF DETERGENT POLLUTION ON THE GENETIC STRUCTURE OF MARINE GASTROPODS	82: 83: UHAIE 84: 85: 86: 87: 88:UND
WHO ISR- 28-G E. NEVO INSTITUTE OF EVOLUTION, UNIVERSITY OF HAIFA	82: 83: UHAIE 84: 85: 86: 87: 88:UND
THE EFFECTS OF CRUDE OIL-SURFACTANT MIXTURES ON THE GENETIC STRUCTURE OF MARINE GASTROPODS	82: 83: UHAIE 84: 85: 86: 87: 88:UND
WHO ITA- 62-D S. MARTELLA DEPARTMENT OF ANIMAL BIOLOGY, UNIVERSITY OF MESSINA, MESSINA	82: 83: UMSAB 84: 85: 86:UND 87:UND 88:UND
INVESTIGATION ON THE OCCURRENCE OF METHYLMERCURY IN SAMPLING FROM A HUMAN POPULATION IN WHICH ARE PREVAILING FISHERMEN (GANZIRRI VILLAGE OF MESSINA). POSSIBLE CORRELATIONS WITH THE FEEDING DIET	82: 83: UMSAB 84: 85: 86:UND 87:UND 88:UND
WHO ITA-107-D A. SALLEO ISTITUTO DI FISIOLOGIA GENERALE, UNIVERSITA DI MESSINA, MESSINA	82: 83: UMSFG 84: 85: 86: 87:UND 88:UND
DISCHARGE MECHANISM OF THE NEMATOCYSTS OF PELAGIA NOCTILUCA. COMPARATIVE AND TOXICOLOGICAL ASPECTS	82: 83: UMSFG 84: 85: 86: 87:UND 88:UND
WHO ITA-109-C L. VOLTERRA ISTITUTO SUPERIORE DI SANITA, ROMA	82: 83: ISUPR 84: 85: 86: 87: 88:UND
HYGIENIC QUALITY OF SCRAPER-FEEDERS MOLLUSCS	82: 83: ISUPR 84: 85: 86: 87: 88:UND
WHO ITA-113-G G. PAGANO ISTITUTO NAZIONALE TUMORI, NAPOLI	82: 83: INTNA 84: 85: 86: 87: 88:UND
IDENTIFICATION AND BIOLOGICAL MONITORING OF SUB-LETHAL RISK FACTORS IN WATER AND SEDIMENTS OF TWO RIVERS IN CAMPANIA REGION, ITALY	82: 83: INTNA 84: 85: 86: 87: 88:UND
WHO ITA-114-D B. PACCAGNELLA DEPARTMENT OF PEDIATRICS, UNIVERSITY OF PADUA, PADUA	82: 83: UPADP 84: 85: 86: 87: 88:UND
HEALTH EFFECTS OF FOETAL AND NEONATAL EXPOSURE TO METHYLMERCURY VIA BREAST-FEEDING	82: 83: UPADP 84: 85: 86: 87: 88:UND
WHO ITA-115-D G. MORETTI INSTITUTE OF HYGIENE, UNIVERSITY OF PADOVA, PADOVA	82: 83: UPAIH 84: 85: 86: 87: 88:UND
STUDY ON THE MERCURY, METHYLMERCURY AND SELENIUM LEVELS IN THE NORTH-EAST ITALIAN COASTAL POPULATIONS	82: 83: UPAIH 84: 85: 86: 87: 88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

WHO ITA-116-G C. BOLOGNESI NATIONAL INSTITUTE FOR CANCER RESEARCH - IST, GENOVA	82: 83: ICRGE 84: 85: 86: 87: 88:UND
INVESTIGATION ON TOPOGRAPHICAL DISTRIBUTION OF FISH TUMORS AS INDICATORS OF ENVIRONMENTAL PATHOLOGY	85: 86: 87: 88:UND
WHO ITA-117-D V. MARIN INSTITUTE OF HYGIENE, UNIVERSITY OF PADOVA, PADOVA	82: 83: UPDIH 84: 85: 86: 87: 88:UND
STUDIES ON THE WATER QUALITY OF THE NORTH ADRIATIC SEA AND ITS EFFECT ON PUBLIC HEALTH	85: 86: 87: 88:UND
WHO MOR- 4-C A. BELEMILH INSTITUT AGRONOMIQUE ET VETERINAIRE, HASSAN II, RABAT	82: 83: IAVRA 84: 85: 86: 87: 3000 88:UND
BILAN DES POLLUTIONS MICROBIENNES DES EAUX ET COUILLAGES EN PARALLELE AVEC L'EUTROPHISATION ET LES FLORAISONS DU PLANCTON	85: 86: 87: 88:UND
WHO MOR- 7-D N. BENMANSOUR INSTITUT NATIONAL D'HYGIENE, RABAT	82: 83: INHRA 84: 85: 86: 87: 88:UND
RECHERCHE ET QUANTIFICATION DES AGENTS. PATHOGENES PRESENTS DANS LES EAUX DE BAIGNADE. COTIERES DU LITTORAL MEDITERRANEEN	85: 86: 87: 88:UND
WHO SPA- 22-K J. IZQUIERDO LABORATORIO MUNICIPAL, BARCELONA	82: 83: LMBAR 84: 85: 86: 87: 88:UND
ESTUDIO DE LA ACUMULACION Y SUPERVIVENCIA DE ELEMENTOS PATOGENOS (BACTERIAS Y ENTEROVIRUS) Y ELEMENTOS TOXICOS (METALES PESADOS) DE ORGANISMOS FILTRADORES EN AGUA DE MAR	85: 86: 87: 88:UND
WHO SPA- 23-D J. IZQUIERDO LABORATORIO MUNICIPAL, BARCELONA	82: 83: LMBAR 84: 85: 86: 87: 88:UND
CORRELATION OF FUNGAL DENSITY IN RECREATIONAL BEACHES WITH HEALTH EFFECTS	85: 86: 87: 88:UND
WHO SPA- 24-D M. G. MARINO ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID	82: 83: ENSMA 84: 85: 86: 87: 88:UND
COMPARISON OF MICROBIOLOGICAL WATER QUALITY CRITERIA APPLICABLE IN THE MEDITERRANEAN	85: 86: 87: 88:UND
WHO SPA- 25-D M. G. MARINO ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID	82: 83: ENSMA 84: 85: 86: 87: 88:UND
ASSESSMENT OF SANITARY RISKS ASSOCIATED WITH TBT'S IN THE MARINE ENVIRONMENT	85: 86: 87: 88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

WHO SPA- 26-D P. ROMERO RAYA/J.J. BORREGO GARCIA	82:
FACULTY OF SCIENCE, DEPT. OF MICROBIOLOGY, UNIVERSITY OF MALAGA, MALAGA	83:
UMGDM 84:	
EPIDEMIOLOGICAL STUDY ON BATHER FROM SEVERAL BEACHES IN MALAGA (SPAIN), ITA	85:
RELATIONSHIP TO THE DETECTION AND ENUMERATION OF PATHOGENIC MICROORGANISMS	86:
	87:
	88:UND
WHO SPA- 27-E J. F. MARINO	82:
ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID	83:
ENSMIA 84:	
DEVELOPING A COMPUTING PACKAGE CAPABLE TO PROCESS ENVIRONMENTAL DATA AND	85:
GRAPHIC GEOGRAPHICAL REPRESENTATION FOR THE MEDITERRANEAN AREA	86:
	87:
	88:UND
WHO SPA- 28-E M. G. MARINO	82:
ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID	83:
ENSMIA 84:	
ANALYSIS OF TREATMENT PROCEDURES USED IN CONJUNCTION WITH SUBMARINE OUTFALL	85:
DISPOSAL OF URBAN SEWAGE INTO THE MEDITERRANEAN	86:
	87:
	88:UND
WHO YUG- 83-D Z. MARETIC	82:
MEDICAL CENTRE, PULA	83:
MCPUL 84:	
PELAGIA NOCTILUCA AND OTHER TOXIC MARINE ORGANISMS - IMPACT ON HUMAN HEALTH	85:
	86:
	87:
	88:UND
WHO YUG- 84-D R. BUZINA	82:
INST. FOR DIABETES, SCHOOL OF MEDICINE, ZAGREB	83:
SMZAG 84:	
EVALUATION OF METHYLMERCURY IN MEDITERRANEAN POPULATIONS AND RELATED HEALTH	85:
HAZARDS	86:
	87:
	88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

RESEARCH PROJECTS IN THE FRAMEWORK OF MED POL  
ONGOING (WMO)  
AS AT 01-02-1988

WMO FRA- 15-L J. MORELLI ECOLE NORMALE SUPERIEURE, PARIS	82: 83: 83: 84: 85: 86:NIL 87: 1000 88:EXT
CONTRIBUTION A L'ETUDE DU CYCLE DE METAUX POTENTIELLEMENT TOXIQUES DANS L'ENVIRONNEMENT ATMOSPHERIQUE MEDITERRANEEN. ORIGINES ET EVALUATION DE L'APPORT AU MILIEU MARIN	85: 86:NIL 87: 1000 88:EXT
WMO FRA- 32-L P. BUAT-MENARD CENTRE DES FAIBLES RADIOACTIVITES, LABORATOIRE DU CNRS, GIF-SUR-YVETTE	82: 83: 83: CNRSG 84: 85: 86:NIL 87: 3000 88:EXT
DYNAMIQUE DU TRANSPORT ET DE LA RETOMBEE ATMOSPHERIQUE DES POLLUANTS METALLIQUES (CD, Pb, Zn, Cu) EN MER LIGURE: REPONSE DE LA COLONNE D'EAU AUX PERTURBATIONS INDUITES	85: 86:NIL 87: 3000 88:EXT
WMO ISR- 20-L U. DAYAN / J.M. MILLER HEBREW UNIVERSITY OF JERUSALEM	82: 83: 83: UHBRE 84: 85: 86: 5800 87: 1600 88:EXT
METEOROLOGICAL REVIEW FOR THE ASSESSMENT OF ATMOSPHERIC TRANSPORT OF POLLUTANTS INTO THE MEDITERRANEAN	85: 86: 87: 1600 88:EXT
WMO ISR- 21-L Y. MAHRER FACULTY OF AGRICULTURE, HEBREW UNIVERSITY OF JERUSALEM	82: 83: 83: UHBFA 84: 85: 86: 87: 3000 88:EXT
THREE DIMENSIONAL MODELLING OF THE EFFECTS OF SEA AND LAND BREEZES ON POLLUTION TRANSPORT IN THE EASTERN MEDITERRANEAN SEA	85: 86: 87: 3000 88:EXT
WMO ISR- 22-L E. WAKSHAL HEBREW UNIVERSITY OF JERUSALEM	82: 83: 83: UHBRE 84: 85: 86: 87: 4500 88:EXT
WMO ITA- 41-L G. CLERICI OSSERVATORIO METEOROLOGICO DI BRERA, MILANO	82: 83: 8555 OMBMI 84: 3160 85: 5340 86:NIL 87:NIL 88:EXT
TRANSPORT OF HEAVY METALS INTO THE MEDITERRANEAN SEA	88:EXT
WMO ITA- 60-L A. PALUMBO OSSERVATORIO METEOROLOGICO, UNIVERSITA DI NAPOLI, NAPOLI	82: 83: 83: UNAOM 84: 85: 86: 87: 2000 88:EXT
ATMOSPHERIC SOURCES OF OCEANIC POLLUTION	88:EXT
WMO ITA- 63-L S. GUERZONI ISTITUTO DI GEOLOGIA MARINA, CNR, BOLOGNA	82: 83: 83: CNRBO 84: 85: 86:NIL 87: 3500 88:EXT
RIVERINE AND ATMOSPHERIC TRANSPORT OF DUSTS AND CONTAMINANTS INTO THE MEDITERRANEAN REGION	88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

-----  
WMO MOR- 3-L M. NEJJAR 82:  
ECOLE MOHAMMADIA D'INGENIEURS, RABAT 83:  
CONTRIBUTION A L'ETUDE DES MECANISMES DE TRANSFERTS DES POLLUANTS AUX POINTS DE 84:  
CONTACT ENTRE LES COURS D'EAU ET LA MER ET A L'INTERFACE AIR/MER 85:  
86:  
87: 1500  
88:EXT  
-----  
WMO SPA- 8-L A. CRUZADO 82:  
CENTRO DE ESTUDIOS AVANZADOS DE BLANES, GIRONA 83:  
STUDY OF LONG AND MEDIUM RANGE ATMOSPHERIC POLLUTANT TRANSPORT INTO THE NORTH 84:  
WEST MEDITERRANEAN SEA 85: 5000  
86:NIL  
87:NIL  
88:EXT  
-----  
WMO YUG- 29-L Z. I. JANJIC 82:  
FEDERAL HYDROMETEOROLOGICAL INSTITUTE, BELGRADE 83:  
DEFINITION OF SYNOPTIC SCALE DRIVING PARAMETERS FOR A MODEL OF ATMOSPHERIC 84:  
POLLUTION TRANSPORT TOWARDS AND INTO THE MEDITERRANEAN SEA 85:  
86:  
87: 1500  
88:EXT  
-----  
WMO YUG- 73-L L. KLASINC 82:  
PHYSICAL CHEMISTRY DEPARTMENT, RUDJER BOSKOVIC INSTITUTE, ZAGREB 83:  
PHOTOCHEMICAL OXIDANTS IN THE TROPOSPHERE - SIGNIFICANCE OF LAND TO SEA 84:  
TRANSPORT IN THE MEDITERRANEAN 85:  
86:  
87: 3500  
88:EXT  
-----  
WMO YUG- 80-L Z. I. JANJIC 82:  
FEDERAL HYDROMETEOROLOGICAL INSTITUTE, BELGRADE 83:  
PRELIMINARY STUDY OF POTENTIAL LONG-RANGE CADMIUM TRANSPORT FROM MAJOR 84:  
IDENTIFIED SOURCES IN EUROPE INTO THE MEDITERRANEAN REGION 85:  
86:  
87: 9000  
88:EXT

-----  
THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

## RESEARCH PROPOSALS SUBMITTED FOR 1988

WMO

AS AT 01-02-1988

WMO GRE- 56-L N. A. KATSANOS PHYSICAL CHEMISTRY LABORATORY, UNIVERSITY OF PATRAS, PATRAS	82: 83: UPAPC 84: MEASUREMENT OF MASS TRANSFER COEFFICIENTS OF POLLUTANTS ACROSS THE ATMOSPHERIC AIR-SEA BOUNDARY
	85: 86: 87: 88:UND
WMO ISR- 26-L U. DAYAN HEBREW UNIVERSITY OF JERUSALEM	82: 83: UHBRE 84: SEASONAL DISTRIBUTION OF THE MIXING DEPT. VALUES IN THE MEDITERRANEAN BASIN
	85: 86: 87: 88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 acheve non accepte en cours de negoc. retire pas d'assistance  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

RESEARCH PROJECTS IN THE FRAMEWORK OF MED POL  
ONGOING (IAEA)  
AS AT 01-02-1988

IAEA FRA- 18-L J. M. MARTIN ECOLE NORMALE SUPERIEURE, PARIS	(COMBINED WITH FRA-23/L)	82: 83: 84: 85:NIL 86:NIL 87:WIT 88:EXT
MECANISMES DE TRANSFERT DE RADIONUCLEIDES ARTIFICIELS ENTRE LE RHONE ET LA MEDITERRANEE. APPORTS DE RADIOELEMENTS ARTIFICIELS PAR LE RHONE A LA MEDITERRANEE		85:NIL 86:NIL 87:WIT 88:EXT
IAEA GRE- 36-L S. VARNAVAS DEPARTMENT OF GEOLOGY, UNIVERSITY OF PATRAS, PATRAS		82: 83: UPADG 84: 85: 86: 87: 3000 88:EXT
A STUDY OF THE BEHAVIOUR OF HEAVY METALS IN RELATION TO SEDIMENTATION AND HYDRAULIC PROCESSES IN A SEMI-ENCLOSED INDUSTRIALIZED EMBAYMENT, PATRAIKOS BAY, WESTERN GREECE		85: 86: 87: 3000 88:EXT
IAEA GRE- 51-L P. KOUTSOUKOS PHYSICAL CHEMISTRY LABORATORY, UNIVERSITY OF PATRAS, PATRAS		82: 83: UPAPC 84: 85: 86: 87: 4000 88:EXT
THE INTERACTION OF POLLUTANTS AT THE AIR/WATER/SEDIMENT INTERFACES		
IAEA ITA- 3-L O. HIEKE MERLIN ISTITUTO CHIMICA GENERALE ED INORGANICA SEZIONE MINERALOGICA, VENEZIA	(SEE ALSO ITA/32-L)	82: 83: ICGIV 84: 5000 85:NIL 86: 5000 87: NIL 88:EXT
TEXTURAL AND MINERALOGICAL CHARACTERS AND ROLE IN THE POLLUTION PROCESSES OF BOTTOM SEDIMENTS IN THE NORTHERN ADRIATIC SEA		
IAEA ITA- 32-L R. FRACHE ISTITUTO DI CHIMICA GENERALE, UNIVERSITA DI GENOVA, GENOVA	(SEE ALSO ITA/03-L)	82: 83: UGECG 84: NIL 85: NIL 86: NIL 87: NIL 88:EXT
CHEMISTRY AND DYNAMICS IN THE TRANSPORT OF HEAVY METALS IN PARTICULATE MATTER IN LIGURIAN AND TYRRHENIAN SEA		
IAEA ITA- 70-A R. CECCHI OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA		82: 83: UMOOG 84: 85: 86: 87: 4000 88:EXT
EXPERIMENTAL PROGRESSES IN HEAVY METALS PIXE ANALYSIS IN SEAWATERS		
IAEA ITA- 76-K L. TASSI PELATI ISTITUTO DI ZOOLOGIA, UNIVERSITA DI PARMA, PARMA	(SEE ALSO ITA/14-L)	82: 83: UPRIZ 84: NIL 85: NIL 86: NIL 87: NIL 88:EXT
BIOLOGICAL TRANSFER OF RADIONUCLIDES IN THE SEA		
IAEA ITA- 85-A S. GUERZONI ISTITUTO DI GEOLOGIA MARINA, CNR, BOLOGNA		82: 83: CNRBO 84: 85: 86: 87: 2000 88:EXT
DEVELOPMENT AND TESTING OF LARGE-VOLUME SAMPLING AND ANALYTICAL TECHNIQUES FOR TRACE METALS IN SUSPENDED AND BOTTOM SEDIMENTS (FOR MONITORING OF MARINE POLLUTANTS)		

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

IAEA SPA- 10-A M. GASSIOT-MATAS INSTITUTO QUIMICA DE SARRIA, BARCELONA	82: 83: 84: IQSBA
STUDY OF ORGANOCHLORINATED POLLUTANTS TRANSFER THROUGH THE MARINE INTERFACE	85: 86: 6000 87: 6000 88:EXT
IAEA TUR- 17-K S. PORTAKAL RADIOBIOLOGY, NUCLEAR RESEARCH AND TRAINING CENTRE, ISTANBUL	82: 83: NRTC1 84: DETERMINATION OF THE MEDITERRANEAN SURFACE WATERS AND SEDIMENTS 238PU, 239 240PU, 137CS, 60Co AND 90Sr LEVELS AT THE SOUTH AND WEST COAST OF TURKEY
	85: 86: 87:NAC 88:EXT
IAEA YUG- 9-A J. MAKJANIC DEPARTMENT OF PHYSICS, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: IRBDP 84: 2000 DEVELOPMENT OF X-RAY EMISSION SPECTROSCOPY AS MULTIELEMENTAL ANALYTICAL TECHNIQUES FOR MONITORING MARINE POLLUTANTS
	85: NIL 86: NIL 87: NIL 88: EXT
IAEA YUG- 10-L V. PRAVDIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 4000 THE ROLE OF SEDIMENTS AND SUSPENDED MATTER IN THE TRANSFER OF SELECTED POLLUTANTS IN THE NORTHERN ADRIATIC BASIN
	85: NIL 86: NIL 87: NIL 88: EXT
IAEA YUG- 11-K M. BRANICA CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 4000 ANTHROPOGENIC INFLUENCE ON THE DISTRIBUTION AND FLUXES OF LEAD SPECIES INTO THE MARINE ENVIRONMENT
	85: NIL 86: 4000 87: NIL 88: EXT
IAEA YUG- 22-K N. AJDACIC UNIVERSITY "VELJKO VLAHOVIC", TITOGRAD	82: 83: UTITO 84: 2000 ACCUMULATION AND TRANSPORT OF RADIONUCLIDES IN THE BIOTA OF THE SOUTH ADRIATIC REGION
	85: NIL 86: NIL 87: NIL 88: EXT
IAEA YUG- 77-A M. SKREBLIN CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ	82: 83: CMRRO 84: OPTIMIZATION OF PROCEDURES FOR THE DETERMINATION OF MERCURY IN ENVIRONMENTAL SAMPLES USING THE M-511 GOLD FILM MERCURY ANALYZER
	85: 86: 87: 2000 88: EXT
IAEA YUG- 78-K A. MALEJ MARINE RESEARCH AND TRAINING CENTRE, PIRAN	82: 83: MRTCP 84: CHEMICAL AND ISOTOPIC COMPOSITION OF MARINE ORGANIC MATTER AS INDICATORS OF ITS ORIGIN
	85: 86: 87: 4000 88: EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

## RESEARCH PROPOSALS SUBMITTED FOR 1988

IAEA

AS AT 01-02-1988

IAEA EGY- 16-L A. A. MOUSSA INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	82: 83: 84: IOFAL 85: 86: 87: 88:UND
GEOCHEMICAL INTERACTION BETWEEN WASTE MATERIALS AND MARINE ENVIRONMENT	
IAEA ISR- 30-L M. D. KROM ISRAEL OCEANOGRAPHIC AND LIMNOLOGICAL RESEARCH INSTITUTE, HAIFA	82: 83: 84: IOLRI 85: 86: 87: 88:UND
DETERMINATION OF THE TOTAL INVENTORY AND SPATIAL DISTRIBUTION OF POLLUTANT TRACE METALS FROM LAND-BASED SOURCES IN THE SEDIMENTS FROM HAIFA BAY, ISRAEL	
IAEA YUG- 65-L M. JURACIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: 84: CMRZA 85: 86:UND 87:UND 88:UND
POLLUTANT TRANSFER PROCESSES: THE ROLE OF SUSPENDED MATTER AND SEDIMENTS IN THE LAND-TO-SEA TRANSPORT IN A KARSTIC ESTUARY	
IAEA YUG- 66-A J. FAGANELI MARINE RESEARCH AND TRAINING CENTRE, PIRAN	82: 83: 84: MRTCP 85:UND 86:UND 87:UND 88:UND
INPUT AND TRANSFORMATIONS OF ALLOCHTHONOUS ORGANIC MATTER IN THE COASTAL WATERS	
IAEA YUG- 74-K M. HORVAT INSTITUTE JOSEF STEFAN, UNIVERSITY E. KARDELJ, LJUBLJANA	82: 83: 84: IJSLJ 85: 86: 87:UND 88:UND
ESTABLISHEMENT OF MERCURY LEVELS IN THE ADRIATIC SEA	
IAEA YUG- 85-K B. COSOVIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: 84: CMRZA 85: 86: 87: 88:UND
OCCURRENCE, FATE AND EFFECTS OF SYNTHETIC SURFACTANTS IN THE MARINE ENVIRONMENT	

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

RESEARCH PROJECTS IN THE FRAMEWORK OF MED POL  
ONGOING (IOC)  
AS AT 01-02-1988

IOC ALG- 5-L D. AIT-KACI-AHMED	82:
INSTITUT DES SCIENCES DE LA MER ET DE L'AMENAGEMENT DU LITTORAL (ISMAL), ALGER	83:
	ISMAL 84:
LA DYNAMIQUE DE PRODUITS POLLUANTS ASSOCIES AUX APPORTS FLUVIAUX EN SUSPENSION	85:
ET LEUR DISPERSION DANS LES SEDIMENTS DU PLATEAU CONTINENTAL ALGERIEN	86: 3000
	87:NIL
	88:EXT
IOC FRA- 20-F P. M. LEHUCHER	82:
SERVICE HYDRAULIQUE, CENTRE D'ETUDES TECHNIQUE, LES MILLES	83:
	SHCET 84:
MEDMODEL (MODELISATION HYDRODYNAMIQUE DU BASSIN OCCIDENTAL DE LA MEDITERRANEE)	85:NIL
	86: 4000
	87: 3000
	88:EXT
IOC GRE- 10-F M. BONAZUNTAS	82:
DEPARTMENT OF CIVIL ENGINEERING, NATIONAL TECHNICAL UNIVERSITY, ATHENS	83:
	UNTAT 84:
MODELLING POLLUTANT CIRCULATION IN COASTAL WATERS	85: 5000
	86:NIL
	87:NIL
	88:EXT
IOC GRE- 35-L M. BONAZUNTAS	82:
DEPARTMENT OF CIVIL ENGINEERING, NATIONAL TECHNICAL UNIVERISTY, ATHENS	83:
	UNTAT 84:
OPTIMIZATION OF POLLUTANT TRANSFER REDUCTION TO THE MEDITERRANEAN FROM	85:
LAND-BASED AND RIVER SOURCES	86: 4000
	87:NIL
	88:EXT
IOC GRE- 40-F G. FERENTINOS	82:
DEPARTMENT OF GEOLOGY, UNIVERSITY OF PATRAS, PATRAS	83:
	UPADG 84:
A STUDY OF THE CIRCULATION PATTERNS IN A FJORD TYPE SEMI-ENCLOSED SEA,	85:
AMBRAKIKOS BAY, IONIAN SEA; A) MECHANISMS GOVERNING THE WATER EXCHANGE BETWEEN	86: 3000
THE OPEN SEA AND THE FJORD, B) RIVER PLUME DISPERSION	87:NIL
	88:EXT
IOC GRE- 48-F M. BONAZUNTAS	82:
DEPARTMENT OF CIVIL ENGINEERING, NATIONAL TECHNICAL UNIVERSITY, ATHENS	83:
	UNTAT 84:
OPTIMIZATION OF SEA OUTFALLS	85:
	86:
	87: 3000
	88:EXT
IOC GRE- 50-F C. KOUTITAS	82:
DEPARMENT OF CIVIL ENGINEERING, ARISTOTELIAN UNIVERSITY OF THESSALONIKI	83:
	UTHCE 84:
PHYSICAL INVESTIGATION AND MODELLING OF CIRCULATION AND POLLUTANTS TRANSPORT IN	85:
AEGEAN SEA	86:
	87: 2000
	88:EXT
IOC ITA- 23-F S. CUNSOLO	82:
DEPARTIMENTO DI FISICA, UNIVERSITA "LA SAPIENZA", ROMA	83:
	URODF 84:
VERTICAL TRANSPORT PROCESSES OF MARINE WATER NEAR THE ITALIAN COASTS	85: 6000
	86:NIL
	87: 3000
	88:EXT

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

IOC ITA- 33-F R. SANTANGELO OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA	82: 83: UMOOG 84: 85: 8000 86:NIL 87: 3000 88:EXT
APPROXIMATE MODELS FOR THE NORTHERN ADRIATIC SEA AND EXPERIMENTAL CHECKS OF CURRENTS IN FIXED POINTS	
IOC ITA- 56-L G. FIERRO ISTITUTO DI GELOGIA, UNIVERSITA DI GENOVA, GENOVA	82: 83: UGEIG 84: 85: 8000 86:NIL 87: 3000 88:EXT
SEDIMENT AND PARTICULATE MATTER STUDIES IN THE LIGURIAN SEA; MECHANISM OF INTERACTION WITH POLLUTANT MATTER	
IOC ITA- 61-A G. C. PAPPALARDO DIPARTIMENTO DI SCIENZE CHIMICHE, UNIVERSITA DI CATANIA, CATANIA	82: 83: UCASC 84: 85: 86:NIL 87:NIL 88:EXT
STUDIES AND MONITORING OF MAJOR AND MINOR ELEMENTS IN MEDITERRANEAN SEAWATERS BY SIMULTANEOUS INDUCTIVELY COUPLED PLASMA (ICP) EMISSION SPECTROMETRY	
IOC ITA- 73-L R. SANTANGELO OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA	82: 83: UMOOG 84: 85: 86:NIL 87:NIL 88:EXT
BOX MODEL FOR EVOLUTION OF METALS IN MEDITERRANEAN SEA	
IOC ITA- 86-F R. SANTANGELO OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA	82: 83: UMOOG 84: 85: 86: 87: 3000 88:EXT
LONGSHORE CURRENTS	
IOC ITA- 89-F S. PIERINI ISTITUTO DI OCEANOLOGIA, ISTITUTO UNIVERSITARIO NAVALE, NAPOLI	82: 83: IUNNA 84: 85: 86: 87: 3000 88:EXT
LOW FREQUENCY OSCILLATIONS IN THE MEDITERRANEAN SEA	
IOC ITA- 90-F F. STRAVISI ISTITUTO TALASSOGRAFICO DI TRIESTE, TRIESTE	82: 83: ITTRI 84: 85: 86: 87:NIL 88:EXT
A REVISION OF THE CLIMATOLOGICAL SERIES IN THE NORTHERN ADRIATIC WITH RESPECT TO OCEANOGRAPHIC PROCESSES	
IOC ITA- 99-L R. PURINI ISTITUTO DI FISICA DELL'ATMOSFERA, CNR, ROMA	82: 83: CNRRO 84: 85: 86: 87:NIL 88:EXT
AIR-SEA INTERACTIONS IN THE MEDITERRANEAN SEA	

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

IOC ITA-103-L S. GUERZONI ISTITUTO DI GEOLOGIA MARINA, CNR, BOLOGNA	82: 83: CNRBO 84: 85: 86: 87: 2000 88:EXT
TRANSPORT OF POLLUTANTS BY SEDIMENTATION	
IOC SPA- 16-L J. ALBAIGES INSTITUTE OF BIO-ORGANIC CHEMISTRY, BARCELONA	82: 83: ICHBA 84: 85: 8000 86: 3000 87: 3000 88:EXT
TRANSPORT AND FATE OF WASTEWATER DISCHARGES OF THE CITY OF BARCELONA AND ADJACENT RIVERS (BESOS AND LLOBREGAT) INTO THE COASTAL WATER	
IOC SPA- 19-F J. SALAT INSTITUTO DE INVESTIGACIONES PESQUERAS DE BARCELONA, BARCELONA	82: 83: IPESQ 84: 85: 86: 3000 87:NIL 88:EXT
EASTERN MEDITERRANEAN DRIFT-CARD EXPERIMENT (DRIFTEX)	
IOC TUR- 16-L U. UNLUATA MIDDLE EAST TECHNICAL UNIVERSITY, ERDEMLI-ICEL	82: 83: UMETE 84: 85: 86: 87: 3000 88:EXT
TRANSPORT OF WATER AND SELECTED SUBSTANCES THROUGH THE STRAIT OF CANAKKALE - THE SEA OF MARMARA - THE STRAIT OF INSTANBUL: A REVIEW	
IOC YUG- 15-F M. KUZMIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84:NIL 85: 3000 86:NIL 87: 3000 88:EXT
MATHEMATICAL MODELLING OF HORIZONTAL CIRCULATION AND VERTICAL DISTRIBUTION OF CURRENTS IN THE NORTHERN ADRIATIC	
IOC YUG- 68-F M. GACIC INSTITUTE OF OCEANOGRAPHY AND FISHERIES, SPLIT	82: 83: IOFSP 84: 85: 86:NIL 87: 3000 88:EXT
PHYSICAL OCEANOGRAPHY COMPONENT OF POLLUTION MONITORING	
IOC YUG- 79-F T. LEGOVIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	82: 83: CMRZA 84: 85: 86: 87: 3000 88:EXT
RECONSTRUCTION OF A CURRENT FIELD AND CONCENTRATION FIELD OF A POLLUTANT IN COASTAL SEA USING MICROCOMPUTER	

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
 LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
 ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
 EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

RESEARCH PROPOSALS SUBMITTED FOR 1988  
IOC  
AS AT 01-02-1988

IOC	ALG- 7-A K. ABDEDDAIM	82:
INSTITUT DES SCIENCES DE LA NATURE, U.S.T.H.B., ALGER		83:
RECHERCHE ET DEVELOPPEMENT DE TECHNIQUES D'ECHANTILLONNAGE ET D'ANALYSE	USTHB	84:
D'HYDROCARBURES PETROLIERS ET DERIVES DE L'INDUSTRIE PETROCHIMIQUE DISSOUS		85:
OU DISPERSES EN MILIEU MARIN		86:
		87:
		88:UND
IOC	EGY- 12-F M. A. SAID	82:
INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA		83:
MODELLING OF CIRCULATION PROCESSES IN THE EGYPTIAN MEDITERRANEAN SHELF WATER	IOFAL	84:
OFF ALEXANDRIA COAST, AND THEIR INFLUENCE ON THE TRANSPORT OF POLLUTANTS IN THE		85:
NEAR-SHORE AREA		86:
		87:
		88:UND
IOC	FRA- 43-L M. AUBERT	82:
CENTRE D'ETUDES ET DE RECHERCHES DE BIOLOGIE ET D'OCEANOGRAPHIE MEDICALE, NICE		83:
ETUDE DE TRANSFERTS DE POLLUTANTS ENTRE LA MER TYRRHENIENNE ET LA MER IONIENNE	CRBOM	84:
PAR LE DETROIT DE MESSINE		85:
		86:
		87:
		88:UND
IOC	ISR- 32-F A. GOLIK	82:
ISRAEL OCEANOGRAPHIC AND LIMNOLOGICAL RESEARCH INSTITUTE, HAIFA		83:
ASSESSMENT OF LITTER QUANTITY AND BEHAVIOUR ON THE ISRAELI BEACHES	IOLRI	84:
		85:
		86:
		87:
		88:UND
IOC	ITA-108-F A. BERGAMASCO	82:
ISTITUTO PER LO STUDIO DELLA DINAMICA DELLE GRANDI MASSE, VENEZIA		83:
MODELLING OF CIRCULATION PROCESSES WITH PASSIVE TRACERS IN THE NORTHERN	GMVEN	84:
ADRIATIC SEA		85:
		86:
		87:
		88:UND
IOC	ITA-112-F F. STRAVISI	82:
LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE		83:
SURFACE TRANSPORT IN THE GULF OF TRIESTE - "STRAGUTS"	CIMAM	84:
		85:
		86:
		87:
		88:UND
IOC	SPA- 29-F M. G. MARINO	82:
ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID		83:
EVALUATION OF FLOATING PERSISTENT SYNTHETIC MATERIALS IN NORTHERN WESTERN	ENSMA	84:
MEDITERRANEAN. ANALYSIS OF THE EFFECT OF THE IMPLEMENTATION OF THE PROTOCOL		85:
FOR LAND-BASED SOURCES		86:
		87:
		88:UND
IOC	YUG- 81-L V. ZUTIC	82:
CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB		83:
POLLUTANT ACCUMULATION AT THE HALOCLINE OF MEDITERRANEAN STRATIFIED ESTUARIES	CMRZA	84:
		85:
		86:
		87:
		88:UND

THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$  
LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN DOLLARS E.U.

COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO ASSISTANCE  
ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE  
EXT: EXTENDED UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

## RESEARCH PROJECTS SUBMITTED FOR 1988

(NOT ACCEPTED)

??	EGY-??	??	A. F. Khattab	
Institute of Weed Control and Channel Maintenance, Cairo				???? NAC
Design of small earthen canals in Egypt				
??	EGY-??	??	S. D. Wahby	
Institute of Oceanography and Fisheries, Alexandria				IOFAL NAC
Effect of land-based sources of pollution on the fisheries of Alexandria area				
??	EGY-??		A. F. Khattab	
Institute of Weed Control and Channel Maintenance, Cairo				????? NAC
Aquatic weed managements in irrigation canals of Egypt by using the chinese grass carp.				
??	EGY-??	??	M. H. Amer	
Drainage Research Institute, Water Research Center, Giza				????? NAC
Protection of agricultural lands from deterioration due to water logging in Ismailiya Governorate				
??	GRE-??	??	K. Fytianos	
Chemistry Department, Aristotelian University of Thessaloniki, Thessaloniki				UTHCD WIT
Organotin compounds in marine organisms (fishes and mussels) in the Thermaikos Gulf, Greece				
??	GRE-??	??	K. Fytianos	
Chemistry Department, Aristotelian University of Thessaloniki, Thessaloniki				UTHCD WIT
Determination of organotin compounds in seawater and sediments in Thermaikos Gulf, Greece				
Moni	ITA-??	??	V. Bruni	
Department of Animal Biology, University of Messina, Messina				UMSAB NAC
Rilevamento delle fonti di inquinamento organico lungo le coste della Sicilia orientale				

NOT ACCEPTED (Cont'd)

IAEA	EGY-??	Moni	S. M. Aly Nasr	
Institute of Graduate Studies and Research, Alexandria				????
Pollutional effects of some heavy metals and chlorinated hydrocarbons in marine sediment of the continental shelf of Alexandria, Egypt				
FAO	EGY-??	G??	A. Botros Tadros	
Institute of Oceanography and Fisheries, Alexandria				IOFAL
Preparation and testing of antifouling and anticorrosive paints and the relation of the fouling problem to the ecology of Alexandria area				
FAO	EGY-??	??	M. Abdel Hady Rady	
Water Distribution and Irrigation Systems Institute, Cairo				?????
Desalting of egyptian northern lakes and its impact on the Mediterranean environment				
FAO/IOC/IAEA	EGY-??	Moni	A. I. Beltagy	
Institute of Oceanography and Fisheries, Alexandria				IOFAL
Pollution induced ecosystem modifications in Egypt. I. Study of detergent problem in Abu-Qir Bay				
FAO/IOC/IAEA	EGY-??	Moni	T. H. Mahmoud	
Institute of Oceanography and Fisheries, Alexandria				IOFAL
Pollution induced ecosystem modifications in Egypt. II. Study of oil problem in Mex Bay				

## ALG

ISMAL: INSTITUT DES SCIENCES DE LA MER ET DE L'AMENAGEMENT DU LITTORAL (ISMAL), ALGER  
 UORUR: UNITE DE RECHERCHE D'ORAN, UNIVERSITE D'ORAN, ORAN

## CYP

MAGNI: FISHERIES DEPARTMENT, MINISTRY OF AGRICULTURE, NICOSIA

## EEC

ISPRA: CCE, CENTRO COMUNE DI RICERCA, STABILIMENTO DI ISPRA, ISPRA

## EGY

HIPHA: HIGH INSTITUTE OF PUBLIC HEALTH, ALEXANDRIA  
 IOFAL: INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA  
 UALFA: FACULTY OF AGRICULTURE, UNIVERSITY OF ALEXANDRIA, ALEXANDRIA  
 UALRC: UNIVERSITY OF ALEXANDRIA RESEARCH CENTRE (UNARC), ALEXANDRIA

## FRA

CERAM: CENTRE D'ETUDE DES RESSOURCES ANIMALES MARINES, ST.JEROME, MARSEILLE  
 CNRSG: CENTRE DES FAIBLES RADIOACTIVITES, LABORATOIRE DU CNRS, GIF-SUR-YVETTE  
 CRBOM: CENTRE D'ETUDES ET DE RECHERCHES DE BIOLOGIE ET D'OCEANOGRAPHIE MEDICALE, NICE  
 ENDUM: STATION MARINE D'ENDOUME, CENTRE D'OCEANOGRAPHIE DE MARSEILLE, MARSEILLE  
 ENSUP: ECOLE NORMALE SUPERIEURE, PARIS  
 FORSF: DEPARTEMENT RECHERCHE, FONDATION OCEANOGRAPHIQUE RICARD, SIX FOURLS LES PLAGES  
 FSLMR: FACULTE DES SCIENCES DE LUMINY, MARSEILLE  
 IFREM: IFREMER, CENTRE DE NANTES, NANTES  
 IFRES: IFREMER, LA SEYNE SUR MER  
 INSER: INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE  
 LARAG: LABORATOIRE ARAGO PRODUCTION PRIMAIRE PELAGIQUE, BANYULS-SUR-MER  
 LPCMV: LABORATOIRE DE PHYSIQUE ET CHIMIE MARINES, VILLEFRANCHE-SUR-MER  
 MNHN: ICHTYOLOGIE GENERALE ET APPLIQUEE, MUSEUM NATIONAL D'HISTOIRE NATURELLE, PARIS  
 SCLAY: C.E.A., CENTRE D'ETUDES NUCLEAIRES DE SACLAY, GIF-SUR-YVETTE  
 SHCET: SERVICE HYDRAULIQUE, CENTRE D'ETUDES TECHNIQUE, LES MILLES  
 UCUCM: LABORATOIRE DE PHYSIQUE ET CHIMIE MARINES, UNIVERSITE P. ET M. CURIE, PARIS  
 UCULB: UNIVERSITE P. ET M. CURIE, LABORATOIRE DE BIOLOGIE, PARIS  
 UCUSZ: STATION ZOOLOGIQUE, UNIVERSITE PIERRE ET MARIE CURIE, VILLEFRANCHE-SUR-MER  
 UMAHL: LABORATOIRE D'HYDROLOGIE, UNIVERSITE D'AIX-MARSEILLE II  
 UNIFM: FACULTE DE MEDECINE, UNIVERSITE DE NICE, NICE  
 UPEBM: LABORATOIRE DE BIOLOGIE MARINE, UNIVERSITE DE PERPIGNAN, PERPIGNAN  
 UPESM: LABORATOIRE DE SEDIMENTOLOGIE ET GEOCHIMIE MARINES, UNIVERSITE DE PERPIGNAN

## GRE

AGHAT: INSTITUTE OF CHILD HEALTH, AGHIA SOPHIA CHILDREN'S HOSPITAL, ATHENS  
 ASHAT: ATHENS SCHOOL OF HYGIENE, ATHENS  
 CHHOA: POISON-CONTROL CENTRE, CHILDREN'S HOSPITAL "P.A. KYRIAKOU", ATHENS  
 DEMAT: CHEMISTRY DEPARTMENT, "DEMOCRITOS" NUCLEAR RESEARCH CENTRE, ATHENS  
 IPAAT: INSTITUTE PASTEUR, ATHENS  
 KYHAT: POISON CONTROL CENTRE, CHILDREN'S HOSPITAL "P.A. KYRIAKOU", ATHENS  
 MENAT: ENVIRONMENTAL POLLUTION CONTROL PROJECT, MINISTRY OF ENVIRONMENT, ATHENS  
 MPPAT: LIBRARY, MINISTRY OF PHYSICAL PLANNING, HOUSING AND ENVIRONMENT, ATHENS  
 NCMRA: NATIONAL CENTRE FOR MARINE RESEARCH, ATHENS  
 TEILA: T.E.I., DEPT. OF VIROLOGY, LARISSA  
 UATAG: DEPT. OF APPLIED HYDROBIOLOGY, AGRICULTURAL UNIVERSITY COLLEGE OF ATHENS  
 UATDC: DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ATHENS, ATHENS  
 UATPG: LABORATORY OF PHYSICAL GEOGRAPHY, UNIVERSITY OF ATHENS, ATHENS  
 UATSC: SCHOOL OF CHEMISTRY, UNIVERSITY OF ATHENS, ATHENS  
 UATZO: ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS  
 UNTAT: DEPARTMENT OF CIVIL ENGINEERING, NATIONAL TECHNICAL UNIVERISTY, ATHENS  
 UPADC: DEPARTMENT OF CHEMISTRY, UNIVERSITY OF PATRAS, PATRAS  
 UPADG: DEPARTMENT OF GEOLOGY, UNIVERSITY OF PATRAS, PATRAS  
 UPAPC: PHYSICAL CHEMISTRY LABORATORY, UNIVERSITY OF PATRAS, PATRAS  
 UTCLH: LABORATORY OF HYDRAULICS, DEMOCRITUS UNIVERSITY OF THRACE, XANTHI  
 UTHCD: CHEMISTRY DEPARTMENT, ARISTOTELIAN UNIVERSITY OF THESSALONIKI, THESSALONIKI  
 UTHCE: DEPARMENT OF CIVIL ENGINEERING, ARISTOTELIAN UNIVERSITY OF THESSALONIKI  
 UTHST: SCHOOL OF TECHNOLOGY, ARISTOTELIAN UNIVERSITY OF THESSALONIKI, THESSALONIKI  
 UTHVM: FACULTY OF VETERINARY MEDICINE, ARISTOTELIAN UNIVERSITY OF THESSALONIKI

## ISR

FELIX: DR. A. FELIX PUBLIC HEALTH LABORATORY, MINISTRY OF HEALTH, TEL AVIV  
 IOLRI: ISRAEL OCEANOGRAPHIC AND LIMNOLOGICAL RESEARCH INSTITUTE, HAIFA  
 KINNE: THE KINNERET LIMNOLOGICAL LABORATORY, TIBERIAS  
 MHHAI: PUBLIC HEALTH LABORATORY, MINISTRY OF HEALTH, HAIFA  
 UBIRG: DEPT. OF LIFE SCIENCES, BAR-ILAN UNIVERSITY, RAMAT-GAN  
 UHAI: INSTITUTE OF EVOLUTION, UNIVERSITY OF HAIFA  
 UMBAS: SCHOOL OF APPLIED SCIENCES AND TECHNOLOGY, THE HEBREW UNIVERSITY, JERUSALEM  
 UHBEH: ENVIRONMENTAL HEALTH LABORATORY, HEBREW UNIVERSITY, JERUSALEM  
 UHBFA: FACULTY OF AGRICULTURE, HEBREW UNIVERSITY OF JERUSALEM  
 UHBRE: HEBREW UNIVERSITY OF JERUSALEM  
 UTADZ: DEPT OF ZOOLOGY, TEL AVIV UNIVERSITY, TEL AVIV

## ITA

CIBML: CENTRO INTERUNIVERSITARIO DI BIOLOGIA MARINA, LIVORNO  
 CIMAM: LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE  
 CNRBO: ISTITUTO DI GEOLOGIA MARINA, CNR, BOLOGNA  
 CNRPI: ISTITUTO DI MUTAGENESI E DIFFERENZIAMENTO DEL CNR, PISA  
 CNRRO: ISTITUTO DI FISICA DELL'ATMOSFERA, CNR, ROMA  
 DSAPI: DIP. DI SCIENZE DELL'AMBIENTE E DEL TERRITORIO, UNIVERSITA DI PISA, PISA  
 ENEAS: E.N.E.A., LA SPEZIA  
 GMVEN: ISTITUTO PER LO STUDIO DELLA DINAMICA DELLE GRANDI MASSE, VENEZIA  
 IBMVE: ISTITUTO DI BIOLOGIA DEL MARE, CNR, VENEZIA  
 ICDMR: ISPETTORATO CENTRALE PER LA DIFESA DEL MARE, MINISTERO MARINA MERCANTILE, ROMA  
 ICGIV: ISTITUTO CHIMICA GENERALE ED INORGANICA SEZIONE MINERALOGICA, VENEZIA  
 IGDNA: ISTITUTO GUIDO DONEGANI, CENTRO RICERCHE NAPOLI, NAPOLI  
 IRSAR: ISTITUTO DI RICERCA SULLE ACQUE, ROMA  
 ISUPR: ISTITUTO SUPERIORE DI SANITA, ROMA  
 ITTRI: ISTITUTO TALASSOGRAFICO DI TRIESTE, TRIESTE  
 IUNNA: ISTITUTO DI OCEANOLOGIA, ISTITUTO UNIVERSITARIO NAVALE, NAPOLI  
 MAFRO: LABORATOIRE CENTRALE HYDROBIOLOGIE, MINISTÈRE AGRICULTURE ET FORETS, ROME  
 MPIBA: LABORATORY OF MARINE BIOLOGY, MOLO PIZZOLI, BARI  
 OMBMI: OSSERVATORIO METEOROLOGICO DI BRERA, MILANO  
 UBRIZ: ISTITUTO DI ZOOLOGIA E ANATOMIA COMPARATA, UNIVERSITA DI BARI, BARI  
 UCASC: DIPARTIMENTO DI SCIENZE CHIMICHE, UNIVERSITA DI CATANIA, CATANIA  
 UCAST: ISTITUTO DI SCIENZE DELLA TERRA, UNIVERSITA DI CATANIA, CATANIA  
 UGEAM: ISTITUTO DI SCIENZE AMBIENTALI MARINE, UNIVERSITA DI GENOVA, GENOVA  
 UGECC: ISTITUTO DI CHIMICA GENERALE, UNIVERSITA DI GENOVA, GENOVA  
 UGEFG: ISTITUTO DI FISIOLOGIA GENERALE, UNIVERSITA DI GENOVA, GENOVA  
 UGEIG: ISTITUTO DI GEOLOGIA, UNIVERSITA DI GENOVA, GENOVA  
 UGEII: ISTITUTO DI IGIENE, UNIVERSITA DI GENOVA, GENOVA  
 UGEDF: CATTEDRA DI OCEANOGRAFIA FISICA, UNIVERSITA DI GENOVA, GENOVA  
 UGEZO: ISTITUTO DI ZOOLOGIA, UNIVERSITA DI GENOVA, GENOVA  
 UMOOG: OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA  
 UMSAB: DEPARTMENT OF ANIMAL BIOLOGY, UNIVERSITY OF MESSINA, MESSINA  
 UMSFG: ISTITUTO DI FISIOLOGIA GENERALE, UNIVERSITA DI MESSINA, MESSINA  
 UNAOM: OSSERVATORIO METEOROLOGICO, UNIVERSITA DI NAPOLI, NAPOLI  
 UPDBA: DIPARTIMENTO DI BIOLOGIA, UNIVERSITA DI PADOVA, PADOVA  
 UPDCR: CNR CENTRO DI RADIOPHISICA, UNIVERSITA DI PAVIA, PAVIA  
 UPLII: ISTITUTO DI IGIENE, UNIVERSITA DI PALERMO, PALERMO  
 UPRIZ: ISTITUTO DI ZOOLOGIA, UNIVERSITA DI PARMA, PARMA  
 URODF: DEPARTMENT OF PHYSICS, UNIVERSITA "LA SAPIENZA", ROMA  
 UROFM: FACOLTA DI MEDICINA, UNIVERSITA DI ROMA, ROMA  
 UROSA: ISTITUTO DI ZOOLOGIA, UNIVERSITA DI ROMA "LA SAPIENZA", ROMA  
 USIBA: DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA  
 USIBG: DIPT GENETICA, BIOLOGIA GENERALE E MOLECULARE, UNIVERSITA DI SIENA, SIENA  
 UTRCD: ISTITUTO DI CLINICA DERMATOLOGICA, UNIVERSITA DI TRIESTE, TRIESTE  
 UTRFF: ISTITUTO DI FARMACOLOGIA E FARMACOGNOSIA, UNIVERSITA DI TRIESTE, TRIESTE  
 UVESA: DIPARTIMENTO DI SCIENZE AMBIENTALI, UNIVERSITA DI VENEZIA, VENEZIA

## LEB

MRCBE: MARINE RESEARCH CENTRE, BEIRUT

## LIB

EPPTR: ENVIRONMENTAL PROTECTION PROGRAMME, SECRETARIAT OF SCIENTIFIC RESEARCH, TRIPOLI  
 PRCTR: PETROLEUM RESEARCH CENTRE, TRIPOLI

## MAL

UMLBS: BIOLOGY SECTION, MATHS AND SCIENCES DEPT., UNIVERSITY OF MALTA

## MON

CSMON: CENTRE SCIENTIFIQUE DE MONACO, MONACO

## MOR

EMIRA: ECOLE MOHAMMADIA D'INGENIEURS, RABAT  
 IAVRA: INSTITUT AGRONOMIQUE ET VETERINAIRE, HASSAN II, RABAT  
 INAVR: INSTITUT NATIONAL AGRONOMIQUE ET VETERINAIRE, RABAT  
 ISPMC: INSTITUT SCIENTIFIQUE DES PECHES MARITIMES, CASABLANCA

## SPA

CEABL: CENTRO DE ESTUDIOS AVANZADOS DE BLANES, GIRONA  
 CEMAS: CONSELLERIA DE ECOLOGIA Y MEDIO AMBIENTE, AJUNTAMENT DE BADALONA  
 ENSMA: ESCUELA NACIONAL DE SANIDAD, CIUDAD UNIVERSITARIA, MADRID  
 ICHBA: INSTITUTE OF BIO-ORGANIC CHEMISTRY, BARCELONA  
 ICMBA: INSTITUTO DE CIENCIAS DEL MAR, BARCELONA  
 IPESQ: INSTITUTO DE INVESTIGACIONES PESQUERAS, BARCELONA  
 IQSBA: INSTITUTO QUIMICO DE SARRIA, BARCELONA  
 MBAR: LABORATORIO MUNICIPAL, BARCELONA  
 DTAR: HEALTH AND SOCIAL SECURITY DEPARTMENT, TERRITORIAL DELEGATION OF TARRAGONA  
 UBAFP: FACULTAD DE BIOLOGIA, UNIVERSIDAD DE BARCELONA, BARCELONA  
 UMGDM: FACULTY OF SCIENCE, DEPT. OF MICROBIOLOGY, UNIVERSITY OF MALAGA, MALAGA  
 UVAUC: UNIVERSITY COLLEGE OF CASTELLON, UNIVERSITY OF VALENCIA, VALENCIA

## TUN

INSTP: INSTOP, SALAMMBQ  
 IPAST: INSTITUT PASTEUR, TUNIS

## TUR

NRTCİ: RADIobiology, NUCLEAR RESEARCH AND TRAINING CENTRE, ISTANBUL  
 UBOEP: BOGAZICI UNIVERSITY, FACULTY OF ENGINEERING, POLL. CONTROL RESEARCH GROUP, ISTANBUL  
 UDOMS: INSTITUTE OF MARINE SCIENCES AND TECHNOLOGY, DOKUZ EYLUL UNIV., IZMIR  
 UEGFS: BIOLOGY DEPT. FACULTY OF SCIENCE, EGE UNIVERSITY, IZMIR  
 UEGHD: HYDROBIOLOGICAL DEPT., EGE UNIVERSITY, IZMIR  
 UMEA: DEPT. OF BIOLOGICAL SCIENCES, MIDDLE EAST TECHNICAL UNIV., ANKARA  
 UMETA: DEPT. OF ENVIRONMENTAL ENGINEERING, MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA  
 UMETE: MIDDLE EAST TECHNICAL UNIVERSITY, ERDEMli-ICEL

BIDUB: BIOLOGICAL INSTITUTE, DUBROVNIK  
 CMRRO: CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ  
 CMRZA: CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB  
 FHIBL: FEDERAL HYDROMETEOROLOGICAL INSTITUTE, BELGRADE  
 IJSLJ: INSTITUTE JOSEF STEFAN, UNIVERSITY E. KARDELJ, LJUBLJANA  
 IOFSP: INSTITUTE OF OCEANOGRAPHY AND FISHERIES, SPLIT  
 IPHZA: INSTITUTE OF PUBLIC HEALTH OF SR CROATIA, ZAGREB  
 IRBDP: DEPARTMENT OF PHYSICS, RUDJER BOSKOVIC INSTITUTE, ZAGREB  
 IRBPC: PHYSICAL CHEMISTRY DEPARTMENT, RUDJER BOSKOVIC INSTITUTE, ZAGREB  
 MCPUL: MEDICAL CENTER, PULA  
 MECDU: MEDICAL CENTRE, DUBROVNIK  
 MRTCP: MARINE RESEARCH AND TRAINING CENTRE, PIRAN  
 UBEIC: INSTITUTE OF CHEMISTRY, UNIVERSITY OF BELGRADE, BELGRADE  
 UKALJ: INSTITUTE OF BIOLOGY, UNIVERSITY EDVARD KARDELJ, LJUBLJANA  
 UTITO: UNIVERSITY "VELJKO VLAKOVIC", TITOGRAD  
 UZANS: FACULTY OF NATURAL SCIENCES AND MATHEMATICS, UNIVERSITY OF ZAGREB, ZAGREB

CONTRIBUTION TO NATIONAL RESEARCH INSTITUTIONS  
THROUGH THE RESEARCH COMPONENT OF MED PC  
(1982-1987)

UNEP/IAAC-XXI/2  
Annex III  
page 33

COUNTRY	Inst.	1982	1983	1984	1985	1986	1987	TOTAL
ALGERIA								
ISMAIL	0	2000	2000	0	6000	3000	13000	13000
UORUR	0	0	0	0	0	0	0	0
Sub-total	0	2000	2000	0	6000	3000	13000	13000
CYPRUS								
MAGNI	0	6500	4500	0	3000	0	16000	16000
Sub-total	0	8500	4500	0	3000	0	16000	16000
Egypt								
WIPHA	0	10000	8000	0	0	0	16000	16000
IOFAL	0	0	0	0	0	0	0	0
UALFA	4000	4000	2000	0	0	0	10000	10000
UALRC	0	3700	3500	4000	0	0	11200	11200
Sub-total	0	0	0	0	0	0	0	0
EGYPT								
WIPHA	0	10000	8000	0	0	0	16000	16000
IOFAL	0	0	0	0	0	0	0	0
UALFA	4000	4000	2000	0	0	0	10000	10000
UALRC	0	3700	3500	4000	0	0	11200	11200
Sub-total	0	17700	10500	4000	0	0	36200	36200
FRANCE								
CERAM	1000	1000	3000	0	0	0	5000	5000
CNRSG	0	0	0	4000	0	0	3000	3000
CRBOH	0	0	0	0	0	0	4000	4000
ENDUM	0	0	0	0	0	0	0	0
ENSUP	0	0	0	0	0	0	11000	11000
PORSP	0	0	0	0	0	0	6500	6500
FSLMR	0	0	0	0	0	0	3500	3500
IFREM	0	0	0	0	0	0	0	0
IFRES	0	0	0	0	0	0	0	0
IN9ER	0	0	0	0	0	0	0	0
LARAG	0	0	0	0	0	0	0	0
LPCMV	0	0	0	0	0	0	0	0
MHHNP	0	0	0	0	0	0	0	0
SCLAV	0	0	0	0	0	0	0	0
SHCAT	0	0	0	0	0	0	0	0
UCUCH	0	0	0	0	0	0	0	0
UCULIS	0	0	0	0	0	0	0	0
UCUSZ	0	0	0	0	0	0	0	0
UMALH	0	0	0	0	0	0	0	0
UNIFH	0	0	0	0	0	0	0	0
UPERB	0	0	0	0	0	0	0	0
UPESM	0	0	0	0	0	0	0	0
Sub-total	1000	3000	10500	31200	35000	22500	107200	107200

COUNTRY Inst.	1982	1983	1984	1985	1986	1987	TOTAL
GREECE							
AGHAT	0	0	3500	3500	0	0	7000
ASHAT	0	5000	15000	9500	8000	42500	42500
CHHOA	0	0	0	500	0	500	500
DEMAT	0	0	0	0	2500	0	2500
IPAAT	0	0	0	5000	0	0	10000
KYHAT	0	0	0	2500	0	0	5000
MENAT	0	0	0	0	0	0	0
MPPAT	0	0	0	0	0	0	0
NCMRA	0	0	0	0	0	0	0
TEILA	0	0	0	4000	4000	4000	28650
UATAG	0	0	0	3000	3000	3000	10500
UATDC	0	0	0	0	0	0	3500
UATPG	0	0	0	9900	0	0	9900
UATSC	0	0	0	4500	500	0	5000
UATZO	0	0	0	17300	8000	6000	50000
UNTAT	0	0	0	5000	4000	3000	12000
UPADC	0	0	0	0	3000	0	3000
UPADG	0	0	0	0	0	3000	6000
UPAPC	0	0	0	0	0	4000	4000
UTCLH	0	0	0	0	0	0	0
UTHCD	0	0	0	0	0	0	0
UTHCR	0	0	0	0	0	0	0
UTHST	0	0	0	0	0	0	0
UTHVM	0	0	0	0	0	0	0
Sub-total	0	11500	45200	86250	41500	39000	222450
ISRAEL							
FELIX	0	6000	5000	4000	3500	0	17500
IOLRI	0	700	7000	10000	4000	0	21700
KINNB	0	0	0	0	8000	0	8000
MHHAI	0	0	0	4000	3500	0	10500
UBIRG	0	0	0	5000	3000	3000	11000
UHAIE	4000	4000	5000	4000	3000	0	20000
UHBAS	0	0	0	0	3000	0	3000
UHBED	0	10000	10000	0	0	6000	36000
UHBFA	0	0	0	0	0	3000	3000
UHBRE	0	0	0	0	5800	6100	11900
UTADZ	0	0	0	0	0	0	3000
Sub-total	4000	19700	27000	37000	33800	24100	145600

COUNTRY	1982	1983	1984	1985	1986	1987	TOTAL
ITALY							
CIBML	0	0	0	0	0	0	6500
CIMAM	0	0	0	0	0	0	15000
CNRBO	0	0	0	0	0	0	7500
CNRPI	0	7000	4000	0	0	0	14000
CNRRO	0	0	0	0	0	0	0
DSAPI	0	0	0	0	0	0	0
ENBAS	0	0	0	0	0	0	0
GMVEN	0	0	0	0	0	0	6000
IBMVE	1500	1500	3000	0	0	0	7500
ICDMR	0	10500	5000	0	0	0	15500
ICGIV	0	0	0	0	0	0	0
IGDNA	0	0	0	0	0	0	10000
IRSAR	0	0	0	0	0	0	0
ISUPR	0	0	0	0	0	0	11000
ITTRI	0	0	0	0	0	0	0
IUNNA	0	0	0	0	0	0	3000
MAFRO	0	0	0	0	0	0	0
MPIBA	0	0	0	0	0	0	0
OMBNI	8555	3160	5340	0	0	0	17055
UBRIZ	0	0	0	4000	1500	0	1500
UCASC	0	0	0	0	0	0	5500
UCAST	0	7000	2000	0	0	0	9000
UGEAM	0	3000	2000	0	1500	0	8500
UGECC	0	700	6500	0	0	0	10200
UGEFQ	3000	3000	2000	0	0	0	8000
UGKIG	0	0	0	0	0	0	0
UGEI	0	7000	4000	0	0	0	11000
UGEOF	0	0	0	0	0	0	0
UGEZO	0	0	0	0	0	0	0
UMOOG	0	0	0	0	0	0	0
UMSAB	0	0	0	0	0	0	0
UMSPQ	0	0	0	0	0	0	0
UNAOM	0	4520	0	0	0	0	0
UPDBA	0	0	0	0	0	0	0
UPDCR	0	0	0	0	0	0	0
UPLII	0	0	0	0	0	0	0
UPRIZ	0	0	0	0	0	0	0
URODF	0	0	0	0	0	0	0
UROFM	0	3000	3000	0	0	0	3000
UROSA	0	4000	4500	0	0	0	9000
USIBA	2500	2500	12500	0	0	0	11500
USIBG	0	0	0	0	0	0	46000
UTRCD	0	0	0	0	0	0	0
UTRFF	0	0	0	0	0	0	0
UVESA	0	0	0	0	0	0	1500
Sub-total	7000	66275	66660	73460	43600	79050	335895

COUNTRY Inst.	1982	1983	1984	1985	1986	1987	TOTAL
LIBANON MRCBR	0	5000	2000	5000	3000	3000	18000
Sub-total	0	6000	2000	3000	6000	3000	18000
LIBYA EPPTR PACTR	0	0	0	0	3000 4000	0	3000 4000
Sub-total	0	0	0	0	7000	0	7000
MALTA UMLBS	3000	3000	2000	6000	6000	3000	22000
Sub-total	3000	3000	2000	6000	6000	3000	22000
MONACO CSMON	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0
MOROCCO EMIRA IAVRA INAVR ISPMC	0	0	0	0	0 5000 0	1500 3000 0	1500 3000 7000 0
Sub-total	0	0	0	0	5000	2000	11500
SPAIN CRABL CRHAB RNMSA ICRBA IPESQ IQSBA LMBAR TDTAR UBAPP UMQDM UVAUIC	0	0 8000 0 0 0 0 8000	0 4000 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	5000 12000 0 14000 6000 6000 18000 13000 2000 8500 9000 10000
Sub-total	0	16000	13600	30000	27000	18000	104500

COUNTRY	Inst.	1962	1963	1964	1965	1966	1967	TOTAL
TUNISIA								
INSTP	0	6000	2000	0	0	0	0	8000
IPAST	0	5000	5350	0	0	0	0	10350
Sub-total	0	11000	7350	0	0	0	0	18350
TURKEY								
NRTC1	0	0	0	0	0	0	0	0
UBORP	0	0	0	0	0	0	0	0
UDOMS	0	6000	9000	0	0	0	0	15000
URGFS	0	0	0	0	0	0	0	0
URGHD	0	5000	2000	0	0	0	0	7000
UMEBA	0	6500	2000	0	0	0	0	8500
UMETA	0	0	0	0	0	0	0	0
UMETH	2000	2500	2000	7000	3000	3000	0	19500
Sub-total	2000	20000	15000	7000	11000	13500	0	68500
YUGOSLAVIA								
BIDUB	0	4000	2000	7450	2000	0	0	15450
CMRRO	3000	12500	11000	15500	3000	11000	0	56000
CMRZA	0	4000	20000	23400	18000	25000	0	90400
PHIBL	0	0	0	0	0	10500	0	10500
IJSLJ	8500	7500	12500	6000	0	0	0	34500
IOFSP	16000	9000	22500	14000	9000	0	0	70500
IPHZA	11000	10000	5000	0	0	0	0	26000
IRBDP	0	2000	0	0	0	0	0	2000
IRBPC	0	0	0	0	0	3500	0	3500
MCPUL	0	0	0	600	600	0	0	1100
MRCDU	0	0	0	600	0	0	0	600
MRTCP	4500	2000	4000	16450	3000	7000	0	32950
UBKIC	0	0	0	0	0	0	0	0
UKALJ	0	0	0	2700	0	0	0	2700
UTITO	0	0	2000	0	0	0	0	2000
UZANS	0	0	0	0	0	0	0	0
Sub-total	3000	63600	69500	106600	46500	66000	0	366100
TOTAL	24000	247175	276710	389510	270300	275600	1481295	

CONTRIBUTIONS TO COUNTRIES  
THROUGH THE RESEARCH COMPONENT OF MED POL  
(1982-1987)

COUNTRY	1982	1983	1984	1985	1986	1987	TOTAL
ALGERIA	0	2000	2000	0	6000	3000	13000
CYPRUS	0	8500	4500	0	3000	0	16000
EBC	0	0	0	0	0	0	0
EGYPT	4000	17700	10500	4000	0	0	36200
FRANCE	1000	3000	10500	31200	39000	22500	107200
GREECE	0	11500	45200	85250	41500	39000	222450
ISRAEL	4000	19700	27000	37000	33800	24100	145600
ITALY	7000	66275	66660	73460	43500	79000	335895
LEBANON	0	6000	2000	3000	5000	3000	18000
LIBYA	0	0	0	0	7000	0	7000
MALTA	3000	3000	2000	6000	5000	3000	22000
MONACO	0	0	0	0	0	0	0
MOROCCO	0	0	0	5000	2000	4500	11500
SPAIN	0	16000	13500	30000	27000	18000	104500
TUNISIA	0	11000	7360	0	0	0	18350
TURKEY	2000	20000	16000	7000	11000	13500	68500
YUGOSLAVIA	3000	63500	69500	106600	46500	66000	355100
<b>TOTAL</b>	<b>24000</b>	<b>247175</b>	<b>275710</b>	<b>388510</b>	<b>270300</b>	<b>275600</b>	<b>1481295</b>

**CONTRIBUTIONS TO COUNTRIES  
THROUGH THE RESEARCH COMPONENT OF MRD POL  
(1982-1987)**

AGENCY	1982	1983	1984	1985	1986	1987	TOTAL
FAO	24000	134100	130700	78500	84000	95600	546800
IARA	0	0	24000	0	30000	25000	79000
IOC	0	0	6500	137820	38000	46000	228320
MONI	0	0	0	0	0	0	0
UNEP	0	0	0	80850	29500	0	110360
WHO	0	100000	111360	77000	83000	76000	446350
WHO	0	13075	3160	14340	6800	34100	70475
<b>TOTAL</b>	<b>24000</b>	<b>247175</b>	<b>275710</b>	<b>388510</b>	<b>270300</b>	<b>275600</b>	<b>1481295</b>

**Annex IV**

**Proposed revised version of the form for the  
submission of research project proposals**

# RESEARCH PROJECT PROPOSAL/PROPOSITION DE PROJET DE RECHERCHE



UNITED NATIONS ENVIRONMENT PROGRAMME  
PROGRAMME DES NATIONS UNIES POUR  
L'ENVIRONNEMENT  
Co-ordinating Unit for the  
Mediterranean Action Plan  
Unité de Coordination du Plan  
d'action pour la Méditerranée

Leoforos Vassileos Konstantinou 48  
P.O. Box 18019  
116 10 Athens - Greece  
Tel. 7244536 Telex 222611 MEDU GR  
Cables: UNITERRA ATHENS  
Telefax: 7218246

- 
1. NAME AND ADDRESS OF INSTITUTE WITH WHICH CONTRACT SHOULD BE SIGNED/NOM ET  
ADRESSE DE L'INSTITUT AVEC LEQUEL UN CONTRAT EST A SIGNER:

- 
2. NAME AND ADDRESS OF CENTRE OR UNIT WHICH WILL CARRY OUT RESEARCH (IF  
DIFFERENT FROM ABOVE)/NOM ET ADRESSE DU CENTRE OU DE L'UNITE QUI EXECUTERA  
LES RECHERCHES (S'ils sont DIFFERENTS DE CEUX MENTIONNES CI-DESSUS):

- 
3. TITLE OF PROJECT/TITRE DU PROJET:

- 
4. PROJECT PERSONNEL/PERSONNEL CHARGE DE L'EXECUTION DU PROJET:

- A. Principal Investigator/  
Chercheur responsable du travail:

---

(Name/Nom)

---

(Position held/poste actuel)

Academic degrees held/Titres universitaires:

Recent publications (if necessary attach list)/Publications récentes (si nécessaire en joindre la liste):

=====

B. Other Staff working on the project and estimated percentage of total working time to be devoted/Autres personnes travaillant sur le projet et estimation du pourcentage du temps de travail qui lui est consacré:

<u>Name/Nom</u>	<u>Academic degrees/ Titres universitaires:</u>	<u>Time/Temps %</u>
1. .....	.....	.....
2. .....	.....	.....
3. .....	.....	.....
4. .....	.....	.....
5. .....	.....	.....
6. .....	.....	.....
7. .....	.....	.....
8. .....	.....	.....
9. .....	.....	.....
10. .....	.....	.....

=====

5. SCIENTIFIC BACKGROUND OF THE PROJECT/CONTEXTE SCIENTIFIQUE DU PROJET:

A. Related Work already performed or in progress/Travaux s'y rapportant déjà exécutés ou en cours d'exécution:

-----  
**B. Relevant publications/Documents publiés sur la question:**

-----  
**6. SCIENTIFIC SCOPE OF THE PROJECT/PORTEE SCIENTIFIQUE DU PROJET:**

**A. Research Objectives/Objectifs de la recherche:**

=====

B. Detailed workplan for first year, including proposed methods or techniques/Plan de travail détaillé pour la première année, avec indication des méthodes ou techniques que l'on se propose d'utiliser:

=====

7. LIST FACILITIES (equipment, research vessel, etc) PRESENTLY AVAILABLE WHICH WOULD BE USED FOR THE PROJECT/ENUMEREZ LES MOYENS (équipement, navire de recherche, etc) DEJA DISPONIBLES QUI SERVIRAIENT A L'EXECUTION DU PROJET:

=====

8. BUDGET.

Estimated cost of project (in dollars USA) for the first year only/ Coût estimatif du projet (en dollars E.U.) pour la première année seulement:

A. Additional staff to be recruited on the project/Personnel supplémentaire à recruter pour le projet:

<u>Personnel</u>	<u>Time/Temps</u>	<u>Coût estimatif</u>
	(%)	

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

Sub-total/Total partiel: \_\_\_\_\_

B. Equipment to be purchased/Equipement à acheter:

<u>Item/Article</u>	<u>Estimated project costs/ Coûts estimatifs du projet</u>
---------------------	--

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

Sub-total/Total partiel: \_\_\_\_\_

-----  
**C. Expendable Supplies/Fournitures consomptibles:**

Item/Article	Estimated project costs/ Coûts estimatifs du projet
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

**Miscellaneous supplies/Fournitures diverses**

Sub-total/Total partiel: \_\_\_\_\_

-----  
**D. Travel for sampling, shiptime etc./Déplacements et temps passé à bord pour les échantillonnages:**

\_\_\_\_\_

Estimated project costs/  
Coûts estimatifs du  
projet

1.	
2.	
3.	

Sub-total/Total partiel: \_\_\_\_\_

-----  
**E. Other Costs/Autres dépenses:**

Item/Article	Estimated project costs/ Coûts estimatifs du projet
--------------	---

1.	
2.	
3.	

Sub-total/Total partiel: \_\_\_\_\_

\*\*\*\*\*  
F. Total estimated cost for first year/Coût estimatif pour la première année:

US \$ \_\_\_\_\_

\*\*\*\*\*  
G. Total estimated cost for second year (if applicable)/Coût total estimatif pour la seconde année (si possible):

US \$ \_\_\_\_\_

\*\*\*\*\*  
9. SUMMARY OF CONTRIBUTION REQUESTED FROM MEDITERRANEAN TRUST FUND (MTF)/RECAPITULATION DES CONTRIBUTIONS DEMANDEES AU FONDS D'AFFECTATION SPECIALE POUR LA MEDITERRANEE (F.A.S.M.):

9.1 Salaries/Salaires

(Indicate which items by referring to numbers 1 to 5 of 8 A)/  
(Indiquer quels articles de nos 1 à 5 de 8 A):

\_\_\_\_\_ \$ \_\_\_\_\_

9.2 Equipment/Equipement (items costing more than \$500)/  
(des articles dont la valeur est plus de \$500)  
(Indicate which items by referring to numbers  
1 to 5 of 8 B)/(Indiquer quels articles en se  
référant aux nos 1 à 5 de 8 B):

\_\_\_\_\_ \$ \_\_\_\_\_

9.3 Expendable supplies/Fournitures consomptibles  
(Indicate which items by referring to numbers  
1-8 of 8 C)/(Indiquer quels articles en se  
référant aux nos 1 à 8 de 8 C):

\_\_\_\_\_ \$ \_\_\_\_\_

=====

9.4 Travel/Déplacements (Indicate which items by referring to numbers 1 to 3 of 8 D)/(Indiquer quels articles en se référant aux nos 1 à 3 de 8 D):

\_\_\_\_\_ \$ \_\_\_\_\_

9.5 Other/Autres (Indicate which items by referring to numbers 1 to 3 of 8 E)/(Indiquer quels articles en se référant aux nos 1 à 3 de 8 E):

\_\_\_\_\_ \$ \_\_\_\_\_

Total amount requested from MTF/Contribution totale du P.A.S.M.

\$ \_\_\_\_\_

=====

10. INDICATE WHETHER CONTRIBUTION IS PREFERRED IN CASH OR IN KIND. IF IN CASH PROVIDE BELOW BANK ACCOUNT NUMBER OF THE INSTITUTE/INDIQUER SI L'ON PREFERE VERSER LA CONTRIBUTION EN ESPECES OU EN NATURE. SI C'EST EN ESPECES, COMMUNIQUER CI-DESSOUS LE NUMERO DE COMPTE BANCAIRE DE L'INSTITUT:

=====

11. PRINCIPAL INVESTIGATOR/CHERCHEUR  
RESPONSABLE DU TRAVAIL: HEAD OF INSTITUTE/DIRECTEUR DE  
L'INSTITUT:

Name \_\_\_\_\_

Name \_\_\_\_\_

.....  
Signature/Signature

.....  
Date/Date

.....  
Signature/Signature

.....  
Date/Date

**Annex V**

**Data quality assurance programme for 1988**

Proposal for an integral project on the quality assurance  
of monitoring data for MED POL  
(by the Marine Environmental Studies Laboratory, ILMR/IAEA)

### 1. Introduction

The growing worldwide concern about the quality of data from marine pollution monitoring programmes has, for some time, been felt within the MED POL component of the Mediterranean Action Plan. Over the past six years, the International Laboratory of Marine Radioactivity (ILMR), IAEA, has collaborated with MED POL in a sustained effort to improve the comparability of the data from national monitoring programmes (contributing to MED POL) by the organization and implementation of intercalibration exercises (originally as part of IAEA's Analytical Quality Control Service). These exercises appear to have resulted in a general improvement in data quality but their effectiveness and scope is rather limited in that they provide only single reference points (probing one stage of an analytical process at best once per year) in what is a much more complex problem of Quality Assurance (QA). More recently, some scientists have questioned whether an intercalibration exercise alone can validate monitoring data from a given laboratory. Furthermore, many laboratories do not participate in exercises at all or return incomplete data sets.

Clearly then, data quality improvement demands a much wider and more dynamically interactive approach to QA. Early in 1987, the Marine Environmental Studies Laboratory (MESL), a new section of ILMR (handling IAEA's work in co-operation with other Agencies in the field of non-radioactive marine pollution), proposed to MED POL a pilot project for adopting such an approach. The work embraces all aspects of QA including instrument maintenance, training, expert evaluation of sampling and sample work-up, intercalibration, reference materials and methods and support with data handling. The Contracting Parties of the Mediterranean Action Plan at their Fifth Ordinary Meeting (Athens, 7-11 September 1987), approved the basic philosophy and essential elements of this proposal including:

- formulation, review and amendment, as appropriate, of Reference Methods;
- formulation of data reporting formats for all the monitoring parameters;
- continuation of the regular intercalibration exercises of analytical techniques for agreed parameters;
- provision of standards and reference materials;
- visits of experts to laboratories in order to work together with local scientists on sampling, analysis, quality assurance procedures, presentation and evaluation of results;

- intercomparison of results including sampling and analysis of split samples and expert assistance to laboratories for sampling, analysis, presentation and evaluation of results;
- assistance to countries for the preparation, design and enhancement of monitoring programmes;
- joint exercises, where appropriate, on monitoring, including intercomparison of sampling and analysis.

In the present document, a more detailed proposal will be presented for implementation of the project in 1988, the project calendar and the budget required. The present proposal addresses chemical contaminants, microbiological parameters require a somewhat different approach which is currently under consideration by WHO.

## 2. Basic objective

To establish an integrated programme for Quality Assurance (QA) for the monitoring of contamination of the marine environment in the Mediterranean region with special emphasis on member States establishing national monitoring programmes.

The programme will cover all aspects of QA including instrument installation and maintenance, training, the use of Reference Methods and Certificated Reference Materials, intercalibration, the production and use of internal reference materials, split-sampling and analysis, data quality review and data handling and application.

The development of this pilot QA programme is based on experiences within the Regional Seas programme (particularly MED POL) together with those of other international organizations such as IOC, ICES and IAEA. Close consultation has been maintained with GEMSI (IOC/UNEP co-sponsored Group of Experts on Methods: Standard and Intercalibration) and GESREM (IOC/UNEP/IAEA co-sponsored Group of Experts on Standards and Reference Materials) in order to formulate the present approach. Both the pilot QA programme and the Expert Groups are foreseen as essential components of a wider new UNEP/IAEA/IOC project presently being devised to provide technical support to all Regional Seas monitoring programmes.

## 3. Concepts

Quality Assurance (QA) - All those planned and systematic actions necessary to provide adequate confidence that monitoring data will satisfy given quality requirements.

Good Laboratory Practice (GLP) - Good laboratory practice is concerned with the organizational process and the conditions under which laboratory studies are planned, performed, monitored, recorded and reported.

#### 4 Critical points for ensuring good data quality

The obtention of high quality data depends on a large number of factors which must be carefully reviewed as part of any integral quality assurance strategy. Some of these are entirely internal matters to the monitoring laboratories involved (good organization and management, location of the laboratories and safety aspects, selection of personnel and allocation of responsibilities) but others may benefit from international support to the national strategy and are listed below. The nature of the support will be described in sections 5-7. The critical points are:

(i) Specialized training

(ii) Experimental/Monitoring strategy:

- sampling and storage:

- sampling strategy
- way of sampling
- storage and preservation
- sample identification

- laboratory analysis:

- use of Reference Methods and standard reporting forms
- correct use of internal and certified reference materials
- function of notebooks

(iii) Apparatus, chemicals, reagents and blanks

- apparatus:

- preventive maintenance and emergency repair
- calibration
- cleaning glassware and other laboratory ware

- chemicals:

- registration (guidelines for)
- quality control checks
- rules for storing waste
- handling and storage
- preparation of standard solutions

- blanks.

## (iv) Quality assessment:

- Inter-laboratory and intra-laboratory testing programmes;
- reference materials.

## (v) Statistical quality control:

- control charts.

## (vi) Data workshop and application:

- data reporting and archiving;
- use of QA data to assess the significance of results from environmental monitoring programmes.

5. Why is this strategy different from previous ones?

The present proposal is for an integral strategy covering all of the above mentioned points. Previous QA projects have focussed on passive intercalibration exercises in which laboratories are supplied with homogenized samples with unknown contaminant concentrations. Whilst this has produced some improvement in data quality it only controls one small part of the overall process - the analysis itself and such important aspects as sampling strategy sample preparation and workup, are left out. Intercalibration exercises can, at best, be organized once per year whereas QA and GLP should be continuous processes with constant feedback to the analysts on how well they are performing. Intercalibration exercises are often regarded as an end-of-term examination instead of a basic and vital part of any monitoring procedure.

6. Basic structure of the present proposal

The new strategy outlined here is essentially very simple and provides a series of steps for guaranteeing data quality:

6.1 Installation and maintenance of equipment

The UNEP/MED POL maintenance engineer will continue his programme of regular visits to laboratories in order to set-up, calibrate, maintain and repair major items of analytical equipment. Furthermore he will now organize courses for users/technicians in order that they will have a greater understanding of their analytical equipment and can perform the routine tasks of preventive maintenance and calibration themselves.

#### 6.2 Setting-up of analytical techniques

Before a QA programme can be fully effective, the most adequate techniques have to be working well on a routine basis. International organizations cannot usually provide basic training in chemistry or biology but can provide specialist training in the monitoring of environmental contaminants both in a central laboratory (in another member State or at the Marine Environmental Studies Laboratory, MESL, in Monaco) and on-job training during a joint monitoring exercise (see below). A full suite of Reference Methods are also available for performing the analysis. Once good analytical results are being achieved under adequate supervision then the next important step in the overall strategy can be initiated.

#### 6.3 The joint monitoring exercise

The joint monitoring exercise provides an opportunity to review all the points outlined in section 3 (above) and to propose the necessary adjustments in order to improve data quality. The idea is simple. One or more specialists from MESL will join the host laboratory in a pilot or routine monitoring exercise in its planning, sampling, analytical and data review stages. He will remain with the group for enough time as is necessary to ensure that the work can be routinely repeated in the host lab without his direct intervention. With experienced host labs this process will be reduced to a split sampling exercise in which the specialist will join the host lab on a sampling expedition, some samples will be homogenized and split into two parts to be analysed at both the national labs and at the specialist's own lab (MESL). The specialist will then prepare a data quality review covering all aspects of QA and comparing his data with that obtained by his hosts and will identify any problems that require correction.

During the joint monitoring exercise, the specialist will also supervise the preparation of a large batch of internal reference material. This is vital for the next step in the integrated QA strategy.

#### 6.4 Establishing a continuous QA programme

Again, the basic concepts involved here are quite simple. Monitoring laboratories, with the help of the specialist mentioned in 6.3, will prepare and carefully analyze an internal reference material, IRM, (MESL will also check the analysis of this material). Certificated reference materials (produced by IAEA/UNEP, NBS (USA) or NRC (Canada)) will also be employed during this calibration procedure. The monitoring laboratory must devote between 5-10% of its analytical effort on the routine analysis of this material. That is to say, every 10 samples or so, the IRM will be analyzed and the results of this analysis will be plotted on a quality control chart. The laboratory must also continue to participate in international intercalibration exercises as an external control procedure. If the internal QA procedure is being performed adequately, it will be no surprise to receive congratulations for good data from the intercalibration exercise!

Unacceptable deviations from the quality control chart will mean that all routine monitoring analysis are stopped until the cause of the problem is discovered and corrected. Again here, the specialist can be consulted, in exactly the same way as the instrument technician is called when a major equipment breakdown occurs. If the budget permits, the specialist will make routine visits to the host laboratory in order to examine quality control charts and discuss new developments in sampling and analytical strategy.

#### 6.5 Production of data reports and data reviews

During their visits, the specialists will assist in the preparation of data reports which will take into account the quality control charts in order to calculate probable errors in the monitoring data. This calculation is vital if environmental impact assessment is to be made of the data.

#### 7. Support documents

A series of Reference Methods has been produced by UNEP in collaboration with IOC/IAEA/FAO/WHO and WMO. These are under constant review in order to provide the best and most generally applicable method for each contaminant. The series will be extended in 1988 in order to provide specific guidelines for quality assurance. Manuals will be produced in order to cover: sampling strategy; sampling, storage and sample workup; good laboratory practice; and, data handling.

#### 8. Implementation of the proposal

The pilot programme is focused on three major activity areas (in order of priority): organochlorine pesticides; trace metal contaminants (including mercury); petroleum hydrocarbons. The first member State selected for testing the procedure was Egypt (upon its own request) and a preliminary mission will be conducted to Algeria and Morocco in late January to discuss their possible participation in the pilot phase. A further country will be selected later in 1988 and it is intended to extend the work to at least three further countries in 1989. The QA programme should be fully operational in the first three countries by the end of 1988.

#### 9. Calendar

This is given in table 1. The calendar has already been agreed for the case of Egypt. As can be seen from table 1, the demand for specialist staff time is extremely heavy, a total of 48 weeks staff time is required for the calendarised activities alone, without taking into account the analysis of split samples, preparative work and the administrative time required to complete the project. A minimum of 10 missions are foreseen and the mission time may total as much as 160 days. If this burden proves to be excessive, the activities outlined for "Country 4" could be postponed until 1989.

10. Budget

A four-line budget is envisaged:

Project staff	38,000 USD
DSA and transport **	24,000 USD
Supplies (expendable)	5,500 USD
Operations and maintenance	2,500 USD
<hr/>	
Total	70,000 USD

\*\* Preliminary missions outlined in line (a) of table 1 are not included in this estimate

Due to current financial restrictions, some of the activities proposed to commence during the second half of 1988 may have to be postponed until early 1989. The final decision on such postponement can be taken in May 1988 without breaking the continuity of activities already started. Travel for participants to Monaco will be covered by funds available at MEDU for "on-job" training.

Table 1

Activity calendar and weeks of staff time ( ) required, missions are indicated with an asterisk

Item	Egypt	Country 2	Country 3	Country 4
a. Formulation of specific requirements for support, identification of host laboratories, parameters to be controlled, etc.	20-24 (1)* November 1987	January 1988 (1)*	January 1988 (1)*	March 1988 (1)*
b. List of training requirements, reception of C.V.s	15 December 1987	15 February 1988	15 February 1988	March 1988
c. Final details of all activities to be worked out, specialists to be assigned	15 January 1988	29 February 1988	29 February 1988	April 1988
d. Training course on organochlorine pesticides (Monaco) (see note 1)	7-23 (4) March 1988	7-23 March 1988	7-23 March 1988	1989
e. Joint sampling mission as outlined in 6.3 (organochlorine pesticides and petroleum hydrocarbons where requested).	2-24 (4)* April 1988	June 1988 (4)*	September 1988 (4)*	1989
f. Discussion of results	June 1988	September 1988	November 1988	1989
g. Training course on trace metals (Monaco) (see note 1)	May 1988 (3)	May 1988	May 1988	May 1988

• / •

Item	Egypt	Country 2	Country 3	Country 4
h. Joint sampling mission (trace metals)	June 1988 (3)*	August 1988 (3)*	September 1988 (3)*	October 1988 (3)*
i. Discussion of results	August 1988	October 1988	November 1988	December 1988
j. Implementation of GLP (as outlined in 6.4)	- Organics - Metals	July 1988 September 1988	October 1988 November 1988	December 1988 December 1988
k. Intercalibration exercise (Organics) (Inorganics)			October - December 1988 October - December 1988	1989 January 1989
l. Review of progress (see note 2)			December 1988 (3)	(3) (2)

Note 1. The training course shall be offered only to scientists normally performing routine analysis in the national laboratories (1 from each centre). These people will then be key figures in the practical aspects of the QA programme and must be carefully selected on the basis of their cvs.

Note 2. Staff time in this row includes that occupied on minor items b) e) f) 1) j) k) 1). It does not, however, include administrative or secretarial support.

**Annex VI**

**Workplan and timetable for  
implementation of the Land-based Sources Protocol**

Annex VI

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

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Comments
1. Completion and Revision of the Glossary	Protocol and Annexes	UNEP/MEDU, WHO	Dec. 1986	French version ready for May Meeting
2. List of substances falling within each of the Groups in Annex I to the Protocol	Annex I	UNEP/MEDU, IRPTC	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	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	Comments to be incorporated by May 88
5. Survey of land-based sources and amounts of pollutants reaching the Mediterranean Sea	Articles 5 and 6; Annexes I and II	UNEP/MEDU, WHO	Dec. 1986	Questionnaire in Eng. ready by end of Jan 88. 15 Feb 88 comments by Unit. To be sent for comments in Feb 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
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	Document ready by Dec 88 covering also 14
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	Being done

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Comments
9. Draft guidelines for the issue of authorisations for the discharge of liquid wastes into the Mediterranean	Article 6	UNEP/MEDU, WHO	Dec. 1987	Being done by Consultant. Ready by May 88
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	Being done by Consultant. Ready by February 88
11. Assessment of the state of pollution in the Mediterranean Sea by organohalogens and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Being done by Consultant. Ready by February 88
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
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. Ready by February 1989
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

IMPLEMENTATION OF THE LAND-BASED SOURCES PROTOCOL DURING 1988-1989

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Comments
1. Assessment of the state of pollution in the Mediterranean Sea by persistent synthetic materials which may float, sink or remain in suspension, and proposed measures	Article 5; Annex I	UNEP/MEDU, IOC, FAO	Dec. 1988	Being done by Consultant. Draft ready by February 1989
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	Being done by Consultant. Summary by end Feb. 88. Draft ready by Nov. 88
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	Draft ready by end of Feb. 88
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	Ongoing
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	Draft ready by end of Feb. 89
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
7. Preparation of draft Annex IV to the Protocol concerning pollution from land-based sources transported by the atmosphere	Article 4	UNEP/MEDU, WMO, ECE	Dec. 1989	ECE to be consulted by MEDU. Ad hoc meeting Dec. 88. Consultant to be hired by ECE
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
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 in June 88

Actions	Relevance to the Protocol	Responsible Agencies	Target Date	Comments
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 being contacted
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 at a later stage

Annex VII

MAP Technical Reports Series Workplan \*

(Until the end of June 1988)

	No. of pages	Resp. person	Target date
No. 13 Large Mediterranean Islands	150	AP	February 1988
No. 14 Historic Settlements II	700	AP	February 1988
No. 15 Aquaculture	150	AP	February 1988
No. 16 Soil Protection	400	AP	February 1988
No. 17 Integrated Planning	300	AP	February 1988
No. 18 Mercury Assessment	350 (E/F)	GG	Published
No. 19 Petroleum Hydrocarbons	130 (E/F)	GK	January 1988
No. 20 Epidemiological studies	250	LS	January 1988
No. 21 Yugoslav Monitoring	225	LJ	February 1988
No. 22 Survival of pathogens (Activity K)	150	LS	February 1988
No. 23 Eutrophication	170	GG	February 1988
No. 24 Pollution Induced Ecosystems (Activity I)	140	GG	February 1988
No. 25 Physical processes	150	GK	March 1988
No. 26 Toxicity and Bioaccumulation (Activity G)	125	GG	March 1988
No. 27 Atmospheric pollution	300	AS	April 1988
No. 28 Jellyfish	150	FSC	April 1988
No. 29 Sedimentation	200	LM	June 1988

\* Number of copies varies between 500 and 700

Annex VIII

Meetings organized by MED POL  
(September 1987 - December 1988)

	<u>Place</u>	<u>Date</u>	<u>Respon.</u>	<u>no. of participants</u>
I 1987				
1. Consultation Meeting on microbial pollution in Mediterranean coastal areas and associated health effects	Athens	22-26 Sept.	WHO	21
2. <u>Ad hoc</u> Meeting on organotin compounds	Athens	5- 7 Oct.	FAO	12
3. <u>Ad hoc</u> Meeting on floating/sinking litter	Athens	14-16 Oct.	IOC/FAO	6
4. Implications of climatic changes in the Mediterranean	Haarlem	21-22 Oct.	MEDU	20
5. Training course on modelling of dispersion of substances released through coastal outfalls	Athens	26-31 Oct.	MEDU/IOC	30
6. Workshop on the impact of carcinogenic, mutagenic and teratogenic marine pollutants on health and the environment	Rome	9-11 Nov.	WHO	59
7. Workshop on airborne pollution in the Mediterranean Sea	Belgrade	10-13 Nov.	WMO	32
8. <u>Ad hoc</u> Meeting on organophosphorus compounds	Athens	18-20 Nov.	FAO	12
9. Consultation Meeting on monitoring of Land-based Sources of marine pollution in the Mediterranean	Split	1- 5 Dec.	WHO	21
10. First Mediterranean Workshop on the transport of pollutants by sedimentation	Villefr.	10-12 Dec.	IAEA/IOC	25

	<u>Place</u>	<u>Date</u>	<u>Respon.</u>	<u>Estimated no. of participants</u>
<u>II 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	14-16 Mar.	IAEA/FAO	7
4. Workshop on methodology and intercalibration of organotin compounds	Monaco	19-21 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	Athens	28-29 Apr.	MEDU	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. Consultation Meeting on carcinogenic substances	Athens	8-10 June	WHO	7
10. Training workshop on the statistical treatment and interpretation of marine community data	Piran	15-24 June	FAO/IOC	20
11. Intercalibration and training workshop on determination of chlorinated hydrocarbons	Monaco	20-24 June	IAEA/FAO/IOC	15
12. <u>Ad hoc</u> Consultation Meeting on monitoring	Monaco	27-28 June	MEDU/IAEA	8

	<u>Place</u>	<u>Date</u>	<u>Respon.</u>	<u>Estimated no. of participants</u>
II <u>1988 (cont'd)</u>				
13. Consultation Meeting on acute toxicity of selected substances to marine organisms	Villefr.	5- 9 Sept.	FAO/IOC	20
14. Consultation Meeting on health-related Mediterranean environmental quality criteria	Ljublj.	12-16 Sept.	WHO	25
15. Task team Meeting on implications of climatic changes in the Medit.	Split	3-7 Oct.	MEDU	20
16. IX ICSEM/IOC/UNEP Workshop	Athens	17-19 Oct.	MEDU	30
17. Consultation Meeting on organotin substances	Erdemli	2- 4 Nov.	FAO/IAEA	7
18. Review Meeting on oceanographic processes of transfer and distribution of pollutants (Activity F)	Zagreb	14-18 Nov.	IOC	20
19. Consultation Meeting on organophosphorus substances	Barcel.	21-23 Nov.	FAO/IAEA	7
20. Consultation Meeting on solid litter	Haifa	6- 8 Dec.	IOC/FAO	7
21. Meeting of responsible investigators of monitoring programmes	Athens	12-16 Dec.	MEDU	40
22. <u>Ad hoc</u> Meeting on data processing	Athens	19-20 Dec.	MEDU	8
23. <u>Ad hoc</u> Meeting for the preparation of annex IV of LBS Protocol	Athens	19-21 Dec.	WMO/ECE	7

Annex IX

Provisional Agenda for the Scientific and Technical Committee Meeting,  
Athens, 23-27 May 1988

1. Opening of the Meeting
2. Rules of procedure
3. Election of Officers
4. Adoption of Agenda
5. Organization of work
6. Progress report on the implementation of MED POL during 1987/1988 and proposed activities and budgetary requirements for 1989
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 cadmium compounds and proposed measures
11. Assessment of the state of pollution in the Mediterranean Sea by organohalogen compounds and proposed measures
12. Assessment of the state of pollution in the Mediterranean Sea by organotin compounds and proposed measures
13. Progress report on the work of the Regional Oil Combating Centre (ROCC) during 1987/1988 and proposed activities and budgetary requirements for 1989
14. Progress in the implementation of the Emergency Protocol
15. Progress report on the work of the Specially Protected Areas/Regional Activity Centre (SPA/RAC) during 1987/1988 and proposed activities and budgetary requirements for 1989
16. Progress in the implementation of the Specially Protected Areas Protocol
17. Other Business
18. Adoption of Report
19. Closure of the Meeting

Annex X

Extracts from  
"United Nations Environment Programme Manual  
on the design and approval of projects"

Annex K (cont'd)

Government/organization in accordance with the terms of the financial agreement made between UNEP and the counterpart donor.

- (i) For meetings or conferences hosted by a Government, UNEP (Chief of Finance Section) shall submit the financial expenditure account to the Government within 90 days of the end of the meeting or conference, in accordance with the host Government agreement and normal UN practice.
- (ii) UNEP shall submit annual or semi-annual expenditure accounts to the counterpart donor, and a final expenditure account within 90 days of the end of the project.

Terms and conditions

Non-expendable equipment

The standard paragraph to be inserted is:

(a) Co-operating agencies and supporting organizations

(...\*) will maintain records of non-expendable equipment (items costing \$500 or more as well as items of attraction such as pocket calculators) purchased with UNEP funds (or with Trust Funds or Counterpart Funds administered by UNEP), and will submit an inventory of all such equipment to UNEP once a year, indicating description, cost, date of purchase, cost and present condition of each item attached to the progress report submitted on 31 March. Non-expendable equipment purchased with funds administered by UNEP remains the property of UNEP until its disposal is authorized by UNEP, in consultation with (...\*...). (...\*...) shall be responsible for any loss of or damage to equipment purchased with UNEP funds. The proceeds from the sale of equipment (duly authorized by UNEP) shall be credited to the accounts of UNEP, or of the appropriate trust fund or counterpart fund.

(b) Programme activity centres

(...\*) will maintain records of non-expendable equipment (items costing \$500 or more as well as items of attraction such as pocket calculators) purchased with UNEP funds, and will submit an inventory of such equipment to the Fund Programme Management Branch once a year, attached to the progress report submitted on 31 March.

Annex J**PROCEDURES COVERING THE COMPLETION AND  
CLOSING OF PROJECTS**Completion of projects

1. A project shall be regarded as operationally (technically) completed when:
  - (a) All activities listed in the project document are satisfactorily completed;
  - (b) The envisaged output(s) are produced, e.g. when:
    - (i) A substantive report (guidelines, conventions, etc.) specified in the project document is received, reviewed in draft, accepted and, where appropriate, published;
    - (ii) A training programme is concluded;
    - (iii) A network or centre is established.
  - (c) Follow-up activities have gathered enough data to allow for the preparation of the terminal report.
2. The "completion" date shall be noted in a footnote to the next project revision. The Note should appear as the last item under Amendments and should read as follows:

Note: Completion date:

Since all activities listed in the project document are satisfactorily completed including follow-up and the output(s) listed below have been produced, the project is now deemed operationally completed \_\_\_\_\_.  
(date)

The project will be officially closed upon receipt of  
 (a) the terminal report\*; (b) the self-evaluation fact sheet from the relevant substantive unit\*; and (c) the final audited statement of account\*; and (d) completion of disposal of non-expendable equipment in accordance with the financial rules\*.

Outputs:

(List output(s) as appropriate)

3. In case the project is not revised within three months of the project being deemed operationally completed, a "note to the file" should be drafted by the Fund. This should take the same form as the note above. The same note should appear in the next project revision.

Annex J (cont'd)Closing of projects

4. A project shall be closed by a revision termed "Project closing revision", when
  - (a) All activities listed in the project document, including follow-up, are satisfactorily completed;
  - (b) The envisaged output(s) are produced (see 1(b) above);
  - (c) No further expenditure is envisaged in relation to the output(s), and even when further expenditure is envisaged, when these expenditures are accounts payable and known with reasonable precision and can be set up as unliquidated obligation of less than \$10,000;
  - (d) The terminal report required, as set out in Annex C of the project document, is received;
  - (e) A self evaluation fact sheet has been prepared by the substantive Unit;
  - (f) The equipment purchased under a project has been disposed of according to the financial rules;
  - (g) A final audited statement of account is received and accepted with unliquidated obligation of less than \$10,000.
5. In cases where the SO/CA has failed to comply with the requirements of 4(d) and 4(g) above, within 60 days and 90 days respectively of the completion of the project, a follow-up reminder will be sent quarterly to the SO/CA for the next two years. At the end of this period, the project will be officially closed even if the above requirements are not met.
6. Note: The above paragraphs imply that:
  - (a) No special revision is required to reflect the "completion" date of a project, but when the project is next revised (e.g. end-year revision) it should reflect para 2 above.
  - (b) The "completion" date shall be used as the official completion date of the project, instead of the date when the project closing revision is signed;
  - (c) Any credit resulting from the cancellation of unliquidated obligations after the closure of the project shall be credited to the Miscellaneous Account.

Annex C

FORMAT OF TERMINAL REPORT

Supporting organization/  
Co-operating agency:

Project No.: \_\_\_\_\_

1. Project activities

Describe the activities actually undertaken under the project, giving reasons why some activities were not undertaken, if any.

2. Project outputs

Compare the outputs generated with the ones listed in the project document.

3. Use of outputs

State the use made of the outputs. When technical reports have been distributed, attach distribution list.

4. Project objectives

Re-state both the short- and the long-term objectives of the project.

5. Degree of achievement of the short-term objectives

On the basis of facts obtained during the follow-up phase, describe how the project document outputs and their use were or were not instrumental in realizing the short-term objectives of the project.

6. Degree of achievement of the long-term objectives

On the basis of facts obtained during the follow-up phase, suggest the degree to which the project might have achieved the long-term objectives.

7. Conclusions

Enumerate the lessons learned during project execution. Concentrate on the management of the project, indicating the principal factors which determined success or failure in meeting the objectives set down in the project document.

8. Recommendations

Make recommendations to:

- (a) Improve effect and impact of similar projects in the future; and
- (b) Indicate what further action might be needed to meet the project objectives.