



# United Nations Environment Programme



UNEP(OCA)/MED WG.7/2 5 January 1989

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

Athens, 9-13 January 1989

Review of 1988-1989 MED POL activities



The present document is a collation of information contained in the attached annexes which describe the present status of development of the main MED POL activities as of December 1988. Whenever either past reference information or information relative to future actions were needed, the relevant annexes were prepared so as to report on activities relative to the whole period 1986-1995. Some of the annexes are partly incomplete or need updating; the Committee's task is therefore to provide in the course of the Meeting the necessary information required.

### List of annexes

Annex I: Status of National Monitoring Agreements

Annex II: Status of preparation of reporting forms

Annex III: Calendar of LBS implementation: 1986-1989

Annex IV: List of 1989 research proposals

Annex V: List of 1988-1989 meetings

Annex VI: List of MAP Technical Report Series

Annex VII: Review of C.P., STC, BUR and IAAC recommendations

Annex VIII: Complete calendar of LBS implementation: 1988-1995

Annex IX: Format of terminal report

Annex X: Document on MAP refocussing (UNEP/BUR/33/4)



ANNEX I

Status of National Monitoring Agreements
1988

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

Annex II

# Status of preparation of data reporting forms

Parameter	Matrix		Presented to Sc.Tec. Committee	Respon- Remarks sible
Heavy metals	Effluents	June 88		WHO SS
Chlorinated hydrocarbons Nutrients	Effluents Effluents			WHO WHO
Heavy metals	Sediments	April 88	X	IAEA
Chlorinated hydrocarbons		_	X	IAEA
Heavy metals	Sea-water	April 88		IOC/ICES ?
Microbial contaminants	Sea-water	Feb. 88		WHO Col of her. IOC/Mon wood religion
Petroleum hydrocarbons	Sediments	April 88		IOC/Man that relike
Petroleum hydrocarbons	Sea-water	Feb.88	X	IOC
Pelagic tar	Sea-water		X	ICC
Oil slicks	Sea-water	Feb.88	X	IOC
Tar on beaches	_	Feb.88	X	IOC
Petroleum hydrocarbons	Organisms	?		IOC/ICES/AFA JCpt - La
Standard physical and chemical parameters		?		FOC/IAEA
Airborne pollution	-	?		WMO



ANNEX III

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	Prepared for Scientific & Tech. Committee
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	Continuoualy covered in the assessments
4.	Assessment of the state of pollution in the Hediterranean Sea by used lubricating oils and proposed measures.	Article 5; Annex I	UNEP/MEDU, UNIDO	Dec. 1986	Prepared
5.	Survey of land-based sources and amounts of pollutants reaching the Mediterranean Sea.	Articles 5 & 6; Annexes I and II	UNEP/MEDU, WHO	Dec. 1986	Questionnaire ready. Sent to N.C. in Dec.88
6.	Assessment of the state of microbial pollution in the Mediterranean Sea and proposed measures for shellfish and shellfish-growing waters.	Article 6; Annex II	UNEP/HEDU, 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 to be ready by Dec.88 covering also 14
8.	Formulation of the procedure for the collection and submission of information from the parties on measures taker, 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 authorization for the discharge of liquid wastes into the Mediterranean	Article 6	unep/medu, Who	Dec. 1987	Being done by consultant
.0.	Assessment of the state of pollution in the Mediterranean Sea by cadmium and cadmium compounds and proposed measures.	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Done
1.	Assessment of the state of pollution in the Mediterranean Sea by organohalogen compounds and proposed measures.	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1987	Being done by consultant
.2.	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
.3.	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
4.	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
5.	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, OCINU,OKW	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 Hediterranean Sea by organo- phosphorus compounds and proposed measures	Article 5; Annex I	UNEP/HEDU, FAO	Dec. 1988	Done
3.	Assessment of the state of pollution in the Mediterranean Sea by organotin compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec. 1988	Done
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/HEDU, 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/Hedu, 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/HEDU, 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. 1988	Ad hoc meeting held Dec. 88
8.	Assessment of the state of pollution in the Hediterranean Sea by radio-active substances and proposed measures	Article 5; Annex I	UNEP/MEDU, IAEA	Dec. 1989	Consultant to be hired

	Actions	Relevance to the Protocol	Responsible Agencies	Targe Date	t	
9.	Assessment of the state of pollution Mediterranean Sea by substances proven carcinogenic, teratogenic or mutagenic and proposed measures	Article 5; Annex I	UNEP/MEDU, WHO	Dec.	1989	Meeting held in June 88
σ.	Assessment of the present state of pollution in the Mediterranean Sea by pathogenic microorganisms and proposed measures	Article 6; Annex II	UNEP/HEDU, WHO	Dec.	1989	Ministries of Health contacted
1.	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/HEDU, WHO, UNIDO	Dec.	1989	Consultant to be hired at a later stage

ANNEX IV

List of 1989 research proposals



# FAO RESEARCH 1989

		MAP	
FAO EGY- 20-G F. T. TAIL INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA EFFECT OF POLLUTION BY HYDROGEN SULFIDES ON THE HYDROBIONS IN BOTH ABU QIR BAY AND WESTERN HARBOUR	IOFAL	82: 83: 84: 85: 86: 87: 38:	89:UND
FAO FRA- 48-G M. ROMEO I.N.S.E.R.M., UNITE 303 "MER ET SANTE", VILLEFRANCHE-SUR-MER ETUDE DES EFFETS TOXIQUES ET PROTECTEURS DU SELENIUM CHEZ DES ALGUES MARINES	INSEM	85: 86: 87: 88:	89:UND
FAO FRA- 45-H A. MOMZIKOFF STATION ZOOLOGIQUE, UNIVERSITE PIERRE ET MARIE CURIE, VILLEFRANCHE-SUR-MER COMPOSITION BIOCHIMIQUE ET CHARGE ENERGETIQUE ADENYLIQUE (AEC) DU PHYTOPLANCTO ATIONS AVEC LE DEVELOPPEMENT DES HERBIVORES PLANCTONIQUES	UCUSZ )n.	82: 83: 84:	89:UND
	NCMRA	87: 88:	89:UND
FAC GRE- 64-G E. PAPATHANASSIOU MATIONAL CENTRE FOR MARINE RESEARCH, ATHENS THE USE OF OIL DISPERSANTS IN THE GULFS OF SARONIKOS, THERMAIKOS, PAGASITIKOS AND THE AREA OF KAVALA-THASOS	NCMRA	82: 83: 84:	89:UND
FAC GRE- 70-G G. VERRIOPOULOS ZOOLOGICAL LABORATORY, UNIVERSITY OF ATHENS, ATHENS TOY OF THE PHYSIOLOGY OF THE PLANKTONIC COPEPOD ACARTIA CLAUSI UNDER THE ELECT OF LETHAL AND SUBLETHAL CONCENTRATIONS OF COBALT.	UATZO	85: 86: 87: 88:	89:UND
FAO GRE- 65-H K. PAGOU NATIONAL CENTRE FOR MARINE RESEARCH, ATHEMS POLLUTION EFFECTS ON PLANKTON COMPOSITION AND SPATIAL DISTRIBUTION, NEAR THE SEWAGE OUTFALL OF ATHEMS (SARONIKOS GULF).	NCMRA	82: 83: 84: 85: 86: 87:	89:UND
FAO GRE- 68-H M. KARYDIS DEPARTMENT OF ENVIRONMENT. UNIVERSITY OF THE AEGEAN. KOS	UAGDE	82: 83: 84: 85: 86: 87:	89:UND
THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$ LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE COM: COMPLETED HAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN WIL ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE EXT: EXTENSION UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION	EN D : NO A	OLLARS E.U. SSISTANCE	

***************************************		MAP	
FAO GRE- 67-K E. STEPHANOU INSTITUTE OF MARINE BIOLOGY, IRAKLIO, CRETE ORGANOTIN COMPOUNDS IN THE MEDITERRANEAN ENVIRONMENT: FATE & DETERMINATION.	IMBIC	86: 87: 88:	39:UND
FAO ISR- 34-G Y. ACHITUV DEPT. OF LIFE SCIENCES, BAR-ILAN UNIVERSITY, RAMAT-GAN	UBIRG	82: 83: 84: 85: 86:	89:UND
FAG ITA-118-H S. FONDA UMANI LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE	CIMAM	82: 83: 84: 86: 87: 88:	89:UND
FAO ITA-119-H E. GHIRARDELLI LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE	CIMAM	82: 83: 84:	89:UND
FAO ITA-120-H L. ROTTINI SANDRINI LABORATORY OF MARINE BIOLOGY - CIMAM, TRIESTE	CIMAM	82: 33: 84: 85: 36: 37: 88:	89:UND
FAO ITA-117-I M. SARA ISTITUTO DI ZOGLOGIA. UNIVERSITA DI GENOVA. GENOVA	UGEZO Ry	85: 86: 87: 88:	89:UND
FAC LEB- 5-H M. ABBOUD-ABI SAAB MARINE RESEARCH CENTRE, BEIRUT	MRCBE	82: 83: 84: 85: 86: 88:	89:UND
FAO YUG-89-G J. PAVICIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB	CMRZA	82: 83:	89:UND
THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN US\$ LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL:	EN DO		

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		MAP	
FAO YUG- 94-G M. OZRETIC CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ OCCURENCE OF ARSENIC AND CADMIUM IN MARINE ORGANISMS FROM VARIOUS NORTHERN ADRIATIC SITES AND THEIR TOXICITY	CMRRO	85: 86: 87: 88:	89:UND
FAO YUG- 95-G C. LUCU CENTRE FOR MARINE RESEARCH. RUDJER BOSKOVIC INSTITUTE, ROVINJ	CMRRO	82: 83: 84: 85: 86: 87:	89:UND
FAO VIIC OS C M. DEMESOONT	CMRRO	82: 83: 84: 85: 86: 87:	89:UND
FAO YUG- 92-H N. ZAVODNIK CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ A CENTURY OF ALTERATIONS IN NORTHERN ADRIATIC SHALLOW WATER COMMUNITIES	CMRRO	82: 83: 84: 85: 86: 87:	89:UND
FAO YUG- 93-H D. ZAVODNIK CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ROVINJ PHYTOPLANKTON BLOOM CONSEQUENCES ON BENTHIC ORGANISHS		82:	89: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.

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UNEP(OCA)/MED WG. 7/2 Annex IV page 4

# IAEA RESEARCH 1989

		MAP	
IAEA EGY- 21-A M. M. SHRIADAH INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA DEVELOPMENT OF A NEW METHODS FOR THE DETERMINATION OF TRACE METALS FOR MONITORING OF MARINE POLLUTANTS	IOFAL	82: 83: 84: 85: 86: 87:	89:UND
IAEA FRA- 49-K P. GARRIGUES (NOT ENDORSED) UNIVERSITE DE BORDEAUX, GROUPE D'OCEANOGRAPHIE PHYSICO-CHIMIQUE, TALENCE LES HYDROCARBURES AROMATIQUES POLYCYCLIQUES DANS L'ENVIRONNEMENT MARIN COTIER ASPECTS PHYSICO-CHIMIQUES ET BIOCHIMIQUES	UBOPT :	84: 85: 86: 87:	89:UND
IAEA TUR- 21-A E. HENDEN FACULTY OF SCIENCE. EGE UNIVERSITY. IZMIR	UEGFS	82: 83: 84: 85: 86:	89:UND
IAEA YUG- 90-A B. RASPOR CENTRE FOR MARINE RESEARCH, RUDJER BOSKOVIC INSTITUTE, ZAGREB DEVELOPMENT OF NEW METHOD FOR THE ESTIMATION OF SEAWATER POLLUTION WITH TRACE METALS	CMRZA	82: 83:	89: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: NC ASSISTANCE ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D'ASSISTANCE EXT: EXTENSION UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

IOC

### RESEARCH 1989

		MAP	
IOC EGY- 18-F A. M. KARAM INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA INVESTIGATION OF THE SURFACE CURRENT REGIME AND THE VERTICAL FINESTRUCTURE IN ABU QIR BAY	IOFÁL	85: 86: 87: 88:	89:UND
IOC EGY- 19-F I. A. MAIYZA INSTITUTE OF OCEANOGRAPHY AND FISHERIES, ALEXANDRIA	IOFAL	82: 83:	89:UND
IOC ITA-121-F R. SANTANGELO OSSERVATORIO GEOFISICO, UNIVERSITA DI MODENA, MODENA INCLUSION OF MICROWAVE SENSORS IN OCEAN MODELLING	UMOOG	82: 83: 84: 85: 86: 87: 88:	89:UND
IOC YUG-88-L J. FAGANELI INSTITUTE OF BIOLOGY, UNIVERSITY EDVARD KARDELJ, LJUBLJANA THE ROLE OF SEDIMENTATION IN THE BIOGEOCHEMICAL CYCLES OF SELECTED HEAVY METAL AND NUTRIENTS IN SHALLOW COASTAL WATERS (GULF OF TRIESTE, NORTHERN ADRIATIC)	UKALJ LS	82: 83: 84: 85: 86: 87: 88:	39: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.

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# WHO

# RESEARCH 1989

	MAP	
WHO FRA- 46-K M. J. GAUTHIER INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE INFLUENCE DES MECANISMES D'OSMOREGULATION SUR LA SURVIE ET L'ADAPTATION DES BACTERIES ENTERIQUES DANS L'ENVIRONNEMENT MARIN	82: 83: 84: 85: 86: 87:	89:UND
WHO FRA- 47-K M. J. GAUTHIER INST. NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE, UNITE INSERM, NICE  INSER ETUDE EXPERIMENTALE DU TRANSFERT DE GENES PLASMIDIQUES ENTRE LES ENTEROBACTERIES DANS L'EAU DE MER, LES SEDIMENTS ET LE TRACTUS DIGESTIF DES INVERTEBRES MARINS	84: 85: 86: 87: 88:	89:UND
WHO GRE- 66-D J. A. PAPADAKIS ATHENS SCHOOL OF HYGIENE, ATHENS ASHAT INVESTIGATION OF THE DERMATOLOGICAL DISEASES AFTER BATHING AND THEIR POSSIBLE RELATION TO THE BACTERIOLOGICAL AND FUNGAL FLORA OF SEA WATER AND SAND AND	82: 83: 84: 85: 86: 87:	89:UND
WHO GRE- 69-K M. KOSTOPOULOU-KARADANELLI DEPARTEMENT DE L'ENVIRONNEMENT, LABORATOIRE PREFECTORAL DE LESVOS  DELPL INFLUENCE SUR LA SURVIVANCE DE LA FLORE MICROBIENNE DANS DES MILIEUX PRESENTANT DE GRANDES CONCENTRATIONS (DE CONCENTRATIONS ELEVEES) EN PHOSPHORE ET AZOTE	82: 83: 84: 85:	89:UND
WHO ISR-33-K R. GHINSBERG DR. A. FELIX PUBLIC HEALTH LABORATORY, MINISTRY OF HEALTH, TEL AVIV FELIX STUDY OF THE PREVALENCE OF PATHOGENIC BACTERIA IN THE SAND OF POPULATED BEACHES IN THE TEL AVIV AREA (MEDITERRANEAN SEA)	86: 87: 88:	89:UND
WHO ITA-122-D B. PACCAGNELLA DEPARTMENT OF PEDIATRICS, UNIVERSITY OF PADUA, PADUA  UPADP EPIDEMIOLOGICAL STUDIES ON CADMIUM AND OTHER HEAVY METALS (FB. CR, NI, ZN, SN) IN FISH AND HUMAN HEALTH IN THE MEDITERRANEAN AREA	82: 83: 84: 85: 86: 87:	89:UND
	82: 83: 84: 85: 96: 87:	0 <b>n</b> u: e8
WHO ITA-124-D A. RENZONI DIPARTIMENTO DI BIOLOGIA AMBIENTALE, UNIVERSITA DI SIENA, SIENA USIBA EVALUATION OF GENOTOXICITY OF METHYL-MERCURY BY EXAMINATION OF SISTER CHROMATID EXCHANGES IN FISHERMEN AT RISK IN THE TYRRHENIAN SEA	82: 83: 84:	ONU: 68
THE FIGURES APPEARING ABOVE REPRESENT THE ANNUAL FINANCIAL ASSISTANCE IN USS LES CHIFFRES FIGURANT CI-DESSOUS REPRESENTENT L'ASSISTANCE FINANCIERE ANNUELLE EN D  COM: COMPLETED NAC: NOT ACCEPTED UND: UNDER NEGOTIATION WIT: WITHDRAWN NIL: NO A ACHEVE NON ACCEPTE EN COURS DE NEGOC. RETIRE PAS D  EXT: EXTENSION UNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION		

		MAP	
WHO ITA-125-D R. DELLA LOGGIA ISTITUTO DI FARMACOLOGIA E FARMACOGNOSIA, UNIVERSITA DI TRIESTE, TRIESTE THE CUTANEOUS TOXICITY OF BLOOMS IN RELATION TO THEIR HEALTH HAZARD	UTRFF	85: 86: 87: 88:	99:UND
WHO ITA-127-G G. HELLUSO UNIVERSITY OF NAPLES, CATTEDRA DI IGIENE	UNCIG	82: 83: 84: 85: 86: 87:	a9:UND
WHO ITA-126-K L. VOLTERRA ISTITUTO SUPERIORE DI SANITA, ROMA	ISUPR	82: 83: 84: 85: 86: 87:	GNU: 88
WHO SPA-30-K A. BOSCH NAVARRO FACULTAD DE BIOLOGIA, UNIVERSIDAD DE BARCELONA, BARCELONA THE SURVIVAL OF HUMAN ENTERIC VIRUSES IN SEAWATER	UBAFP	82: 83: 84: 85: 86: 87:	89:UND
WHO SPA-31-K J. L. ALONSO MOLINA INSTITUTE OF HYDROLOGY AND ENVIRONMENT, POLYTECHNICAL UNIVERSITY, VALENCIA CONTROL OF NEW INTESTINAL PATHOGENS: CAMPYLOBACTER AND MOTILE AEROMONAS FROM MARINE RECREATIONAL WATERS OF VALENCIA (SPAIN)	HIAVU	82: 83: 84: 85: 86: 87:	89:UND
WHO TUR- 22-G E. ARINC DEPT. OF BIOLOGICAL SCIENCES, MIDDLE EAST TECHNICAL UNIV., ANKARA  DEVELOPMENT OF AN ENZYMATIC ASSAY SYSTEM FOR DETERMINATION OF BIOACTIVATION OF IC ORGANIC CHEMICALS	UMEBA	82: 83: 84: 85: 86: 87:	89:UND
WHO YUG-91-K V. PRESECKI INSTITUTE OF PUBLIC HEALTH OF SR CROATIA, ZAGREB  LABORATORY PROCEDURES FOR ENTEROVIRUSES, ROTA VIRUS AND HEPATITIS A VIRUS PRESENCE DETERMINATION IN SEAWATER, SEDIMENT AND SHELFISH (MUSSEL)	IPHZA	82: 83: 84: 85: 86: 87: 88:	89:UND

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

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UNEP(OCA)/MED WG. 7/2 Annex IV page 8

WMO

### RESEARCH 1989

WMO ISR- 35-L U. DAYAN 82: 89:UND NOAA-ERL-AIR RESOURCES LABORATORY, SILVER SPRING. MD, USA 33: NEARL 84: AEROSOL REMOTE SENSING OVER THE MEDITERRANEAN BASIN FROM THE NOAA SATELLITES 25: 96: 87: 88:

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 MEGOC. RETIRE PAS D'ASSISTANCE EXT: EXTENSION JNDER NEGOTIATION - PROLONGATION EN COURS DE NEGOTIATION

### REJECTED RESEARCH PROPOSALS 1989

### EGYPT

Shriadah M.M.A.

Environmental studies along the coasts of Alexandria including Abu-Qir Bay, Eastern Harbour, El-Anfushy Bay and El-Mex Bay.

El-Sarsaf W.M.

Classification of stages and degree of eutrophication on the basis of quantitative parameter by using the heterotrophic potential and microbial activity (The method C-14 labelled organic matter (Amine acids-glycose labelled).

El-Deek M.

Monitoring of qualities and quantities of phenolic compounds.

Abdelmoneim M. A.

Trace Metals in Waters from S.E. Mediterranean and its lagoons.

Emara H. I.

A study on the levels of some heavy metals and petroleum hydrocarbons in water, sediments and marine organisms in some polluted areas of the Egyptian Mediterranean waters

### **CYPRUS**

Loizides L.

Monitoring of the transport of pollutants to the sea through the atmosphere.

Demetropoulos A.

Research on pollution input, dispersion of pollutants, and their effects on the marine life in the Vassilike area.

UNEP(OCA)/MED WG. 7/2 ANNEX IV page 10

Rejected Research Proposals 1989 (cont'd)

### GREECE

Polynuclear Aromatic Hydrocarbons Stephanou E.

(PAH) and fuel oil derived compounds in air, sediment and marine organisms of a marine environment. Study of

their incidence and fate.

Movement of organohalogen and Albanis T. A.

organophosphorus pesticid residues, agricultural areas, from Amvrakicos and Thermaicos Gulf

(Greece).

### **ISRAEL**

Monitoring of Macroplanktonic Spanier E.

> the Southeastern Blooms in

Mediterranean.

Measurement and control of copper Friedlander M.

in marine effluents of a power plant

through accumulation by seaweeds.

Estimation of the air quality by Garty J.

the use of transplanted lichens around a steel smelter near Akko, close to the Mediterranean Coast, NW

Israel.

# TURKEY

Gökçay C. F. Biological treatment of Ni(II) and

Cr(VI) containing wastes with

special emphasis on Izmir Bay case.

A comparative study on the levels Uysal H.

> of some metals in the tissues and of Sarda sarda, Scomber organs scomber, Sardina pilchardus, Dentex annularis, and Thynnus thynnus in the bay of Izmir and vicinity.

### RESUBMITTED RESEARCH PROPOSALS 1989

### FRANCE

WMO-FRA-15-L

MORELLI J.

Contribution à l'étude du cycle de mètaux potentiellement toxiques dans l'environnement atmosphérique méditerranéen. Origines et évaluation de l'apport au milieu marin.

FAO-FRA-24-G

Chassard-Bouchaud C.

Toxicité, pérsistance et bioaccumulation du chrôme dans une chaine trophique d'organismes marins comestibles: aspects structuraux, ultrastructuraux et micro-analytiques.

FAO-FRA-29-G

UNIVERSITE DE PERPIGNAN

Faculté des Sciences

Etude expérimentale de l'effet du cadmium sur les juvéniles (civelles et anguilles jaunes) de l'anguille européenne Anguilla anguilla.

WMO-FRA-32-L

BUAT-MENARD P.

Dynamique du transport et de la retombe atmosphérique des polluants métaliques (Pb, Cd, Zn, Cu) en mer ligure. Réponse de la colonne d'eau aux pérturbations induites.

FAO-FRA-39-G

Chassard-Bouchaud C.

Etude de la Bioaccumulation, de la pérsistance et de la toxicité de l'uranium et du plutonium chez des organismes Méditerranéens consommés par l'homme.

FAO-FRA-41-I

Bernard P.

Impact de la pollution (Chimique et Bactériologique) sur la physiologie et la composition chimique de Posidonia Oceanica

### **ISRAEL**

WHO-ISR-28-G

Nevo E.

The effects of organic pollution with detergent and with oilsurfactant mixtures on the genetic structure of marine gastropods. UNEP(OCA)/MED WG. 7/2 ANNEX IV page 12

Resubmitted Research Proposals (cont'd)

# **ITALY**

WMO-ITA-60-L

Palumbo A.

Atmospheric contribution to marine pollution in the Mediterranean Sea.

IOC-ITA-108-F

Bergamasco A.

Modelling of circulation processes with passive tracers in the Northern Adriatic Sea.

WHO-ITA-80-G

Bronzetti G. L.

Detection of mutagenic and carcinogenic pollutants in marine water using short term test.

IOC-YUG-18-A

Cosovic B.

Development of new electroanalytical techniques for determination of surface active substances and detergents in seawater and sea surface microlayer.

ANNEX V 1988 - 1989 Meetings

				<del></del>	<del></del>
		Place	<u>Date</u>	Respon.	No. of participants
Ī	1988				
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.	Ad hoc consultation meeting on data processing (transfer from 1987)	Athens	25-27 Apr.	MEDU	10
6.	Ad hoc 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/ICC	20
11.	Intercalibration and training workshop on determination of chlorinated hydrocarbons	Monaco	20-24 June	IAEA/FAO, IOC	/ 15
12.	Ad hoc Consultation Meeting on monitoring	Monaco	27-28 June	MEDU/IAE	A 8

		<u>Place</u>	<u>Date</u>	Respon.	No. of participants
Ī	1988 (cont'd)				
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.	ICC	20
19.	Consultation Meeting on organophosphorus substances	Barcel.	21-23 Nov.	FAO/IAEA	7
20.	Consultation Meeting on solid litter	Haifa	6-8 Dec.	ICC/FAO	7
21.	Ad hoc Meeting for the preparation of annex IV of LBS Protocol	Athens	19-21 Dec.	WMO/	7

		Place	Date	Respon.	Estimated no. of participants
<u> 11</u>	<u>1989</u>				
1.	Inter-Agency AAdvisory Committee	Athens	9-13 Jan.	MEDU	8
2.	Ad hoc meeting on eutrophication	Athens	8 -10 Mar.	MEDU	
3.	Ad hoc consultation meeting on monitoring	Athens	20-24 Mar.	MEDU	
4.	II Scientific and Technical Committee Meeting	Athens	29 May 3 June	MEDU	40
5.	Ad hoc consultation meeting on data processing	Athens		MEDU	
6.	Consultation meeting on microbial pollution			WHO	
7.	Consultation meeting on programmes and measures in connection with Art. 7 LBS			WHO	
8.	Workshop on airborne pollution			WHO	
9.	Intercalibration and training course on micr. pollution			WHO	
10.	Intercal, and training course organic mercury			IAEA	
11.	Training course on analysis o physical ocean. data	f		ICC	

Annex VI

MAP Technical Reports Series Workplan \*

(Until the end of June 1988)

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

<sup>\*</sup> Number of copies varies between 500 and 700

# PUBLICATIONS IN THE MAP TECHNICAL REPORTS SERIES

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

  MAP Technical Reports Series No. 10. UNEP, Athens, 1987.
- No.11 UNEP: Rehabilitation and reconstruction of Mediterranean historic settlements. Documents produced in the first stage of the Priority Action (1984-1985). MAP Technical Reports Series No. 11. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1986.

- No.12 UNEP: Water resources development of small Mediterranean islands and isolated coastal areas. Documents produced in the first stage of the Priority Action (1984-1985). MAP Technical Reports Series No. 12. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.13 UNEP: Specific topics related to water resources development of large Mediterranean islands. Documents produced in the second phase of the Priority Action (1985-1986). MAP Technical Reports Series No. 13. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.14 UNEP: Experience of Mediterranean historic towns in the integrated process of rehabilitation of urban and architectural heritage.

  Documents produced in the second phase of the Priority Action (1986).

  MAP Technical Reports Series No. 14. UNEP, Priority Actions

  Programme, Regional Activity Centre, Split, 1987
- No.15 UNEP: Environmental aspects of aquaculture development in the Mediterranean region. Documents produced in the period 1985-1987.

  MAP Technical Reports Series No. 15. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.16 UNEP: Promotion of soil protection as an essential component of evironmental protection in Mediterranean coastal zones. Selected documents (1985-1987). MAP Technical Reports Series No. 16. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.17 UNEP: Seismic risk reduction in the Mediterranean region. Selected studies and documents (1985-1987). MAP Technical Reports Series No. 17. UNEP, Priority Actions Programme, Regional Activity Centre, Split, 1987.
- No.18 UNEP/FAO/WHO: Assessment of the state of pollution of the Mediterranean Sea by mercury and mercury compounds. MAP Technical Reports Series No. 18. UNEP, Athens, 1987.
- No.19 UNEP/IOC: Assessment of the state of pollution of the Mediterranean Sea by petroleum hydrocarbons. MAP Technical Reports Series No. 19, UNEP, Athens, 1988.
- No.20 UNEP/WHO: Epidemiological studies related to Environmental Quality Criteria for bathing waters, shellfish-growing waters and edible marine organisms (Activity D). Final report on project on relationship between microbial quality of coastal seawater and health effects (1983-86). MAP Technical Reports Series No. 20. UNEP, Athens, 1988.
- No.21 UNEP/UNESCO/FAO: Eutrophication in the Mediterranean Sea: Receiving Capacity and Monitoring of Long term Effects. MAP Technical Reports Series No. 21. UNEP, Athens, 1988.

UNEP(OCA)/MED WG. 7/2 Annex VI page 4

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

Annex VII
Review of C.P., STC, BUR and IAAC recommendations

Action requested	Ref. (UNEP(OCA) MED WG.1/12	Resp. Organiz.	Remarks
Preparation and adoption of contingency plans	page 2	UNEP	
Sea urchins	page 3	UNEP	
Ass. Cadmium: updating	page 3	UNEP/ FAO/ WHO	
Airborne monitoring programmes	page 4	WMO	
Ad hoc expert group on airborne monitoring	page 4	WMO	
Second workshop on airborne 1989	page 4	WMO UNEP	
Dumping protocol: list of competent authorities; reports of substances dumped;	page 5	UNEP	
ammendment of protocol for incineration	page 6	UNEP	
Ass.lubr. oils: updating and questionnaire	page 6	UNEP/?	
Ass. organotin: revision of proposed measures	page 6	UNEP/FAO	
Feasibility of ban of free assoc. tributyltin paints	page 6	UNEP	
Info to ROCC on hazardous subst.	page 8	All Agencies	
Protocol on exploration and exploitation and technical meeting '89	page 9	UNEP	
Info on implementation of Geneva declaration	page 12	UNEP	
Preparation of data reporting forms			see annex I

Complete calendar of LBS implementation: 1988-1995

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

	Actions	Relevance to the Protocol	Responsible Agencies	Tarq	
1.	Assessment of the state of pollution in the Mediterranean Sea by persistent synthetic materials which may float, sink or remain in suspension, and proposed measures	Article 5; Annex I	UNEP/MEDU, UNIDO	Dec.	1988
2.	Assessment of the state of pollution in the Mediterranean Sea by organophosphorus compounds and proposed measures	Article 5; Annex I	UNEP/MEDU, FAO	Dec.	1988
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
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, PAO, WHO	Dec.	1988
5.	Evaluation of in situ investigations on selected submarine outfalls to determine their technical efficiency and cost-effectiveness	Article 7, para 1(a)	UNEP/MEDU, WHO	Dec.	1988
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
7.	Preparation of draft Annex IV to the Protocol concerning pollution from land-based sources transported by the atmosphere	Article 4	UNEP/MEDU, WMO	Dec.	1989
8.	Assessment of the state of pollution in the Mediterranean Sea by radio-active substances and proposed measures	Article 5; Annex I	UNEP/MEDU, IAEA	Dec.	1989
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

		·		
	Actions	Relevance to the Protocol	Responsible Agencies	Target Date
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
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, UN IDO	Dec. 1989
12.	Assessment of the state of pollution by crude oils and hydrocarbons of any origin and proposed measures	Article 6; Annex II	UNEP/MEDU	Dec. 1990
13.	Assessment of the state of pollution in the Mediterranean Sea by zinc, copper and lead with proposed measures	Article 6; Annex II	UNEP/MEDU, PAO	Dec. 1990
14.	Assessment of the present state of pollution in the Mediterranean Sea by nickel, chromium, selenium and arsenic with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1990
15.	Identification and categorisation of alternative products, installations and other processes capable of reducing pollution of the Mediter-ranean marine environment	Article 7, para 1(d)	UNEP/MEDU, WEO, UN IDO	Dec. 1990
16.	Assessment of the present state of pollution in the Mediterranean Sea by inorganic compounds of phosphorus and elemental phosphorus and proposed measures	Article 6; Annex II	UNEP/MEDU, IOC	Dec. 1991
17.	Assessment of the present state of pollution in the Mediterranean Sea by non-biodegradable detergents and other surface-active substances and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1991
18.	Assessment of the present state of pollution in the Mediterranean Sea by thermal discharges and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1991

	Actions	Relevance to the Protocol	<del>-</del>	Tarq	
19.	Common guidelines for the determination of the length, depth and position of pipelines for coastal outfalls, taking into account, in particular, the methods used for pre-treatment of effluents	Article 7, para 1(a)	UNEP/MEDU, WHO, UNIDO	Dec.	1991
20.	Compilation of a Mediterranean inventory of effluents requiring special and/or separate treatment including type, category, amount, locality and existing treatment, if any, together with, wherever possible, those local characteristics influencing the effects of such effluents on the marine environment, and the feasibility of separate and/or special treatment	Article 7, para 1(b)	UNEP/MEDU, WHO, UNIDO	Dec.	1991
21.	Formulation of draft common guidelines, standards and criteria for special requirements for effluents necessitating separate treatment	Article 7, para 1(b)	UNEP/MEDU, WHO, UNIDO	Dec.	1991
22.	Survey on the yield and the cost/ benefit of the application of alternative products and processes	Article 7, para 1(d)	UNEP/MEDU, WHO, UNIDO	Dec.	1991
23.	Assessment of the present state of pollution in the Mediterranean Sea by acid or alkaline compounds of such composition and in such quantity that they may impair the quality of seawater and proposed measures	Article 6; Annex II	UNEP/MEDU, IOC	Dec.	1992
24.	Assessment of the present state of pollution in the Mediterranean Sea by substances which have, directly or indirectly, an adverse effect on the oxygen content of the marine environment, especially those which may cause eutrophication and proposed measures	Article 6; Annex II	UNEP/MEDU, IOC	Dec.	1992
25.	Assessment of the present state of pollution in the Mediterranean Sea by barium, uranium and cobalt with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec.	1992
26.	Assessment of the present state of pollution in the Mediterranean Sea by cyanides and fluorides and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec.	1993

Actions	Relevance to the Protocol	Responsible Agencies	Target Date
27. Assessment of the present state of pollution in the Mediterranean Sea by substances which, though of a non-toxic nature, may become harmful to the marine environment or may interfere with any legitimate use of the sea owing to the quantities in which they are discharged and proposed measures	Article 6; Annex II	UNEP/MEDU,	Dec. 1993
28. Assessment of the present state of pollution in the Mediterranean Sea by organosilicon compounds and substances which may form such compounds in the marine environment, excluding those which are biologically harmless or are rapidly converted into biologically harmless substances and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1993
29. Assessment of the present state of pollution in the Mediterranean Sea by antimony, tin and vanadium with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994
30 Assessment of the present state of pollution in the Mediterranean Sea by substances which have a deleterious effect on the taste and/or smell of products for human consumption derived from the aquatic environment, and compounds liable to give rise to such substances in the marine environment and proposed measures	Article 6; Annex II	UNEP/MEDU, WHO	Dec. 1994
31. Assessment of the present state of pollution in the Mediterranean Sea by biocides and their derivatives not covered in Annex I and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1994
32. Assessment of the present state of pollution in the Mediterranean Sea by titanium, boron and silver and proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1995
33. Assessment of the present state of pollution in the Mediterranean Sea by molybdenum, beryllium, thallium and tellurium with proposed measures	Article 6; Annex II	UNEP/MEDU, FAO	Dec. 1995

#### Annex IX

#### FORMAT OF TERMINAL REPORT

Supporting organization/ Co-operating agency:

Project No.: FP/ME/5102-81-01

#### 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.

#### 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.

#### 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.

#### Annex X

Document on MAP refocussing (UNEP/BUR/33/4)





# United Nations Environment Programme



UNEP/BUR/33/4 17 October 1988

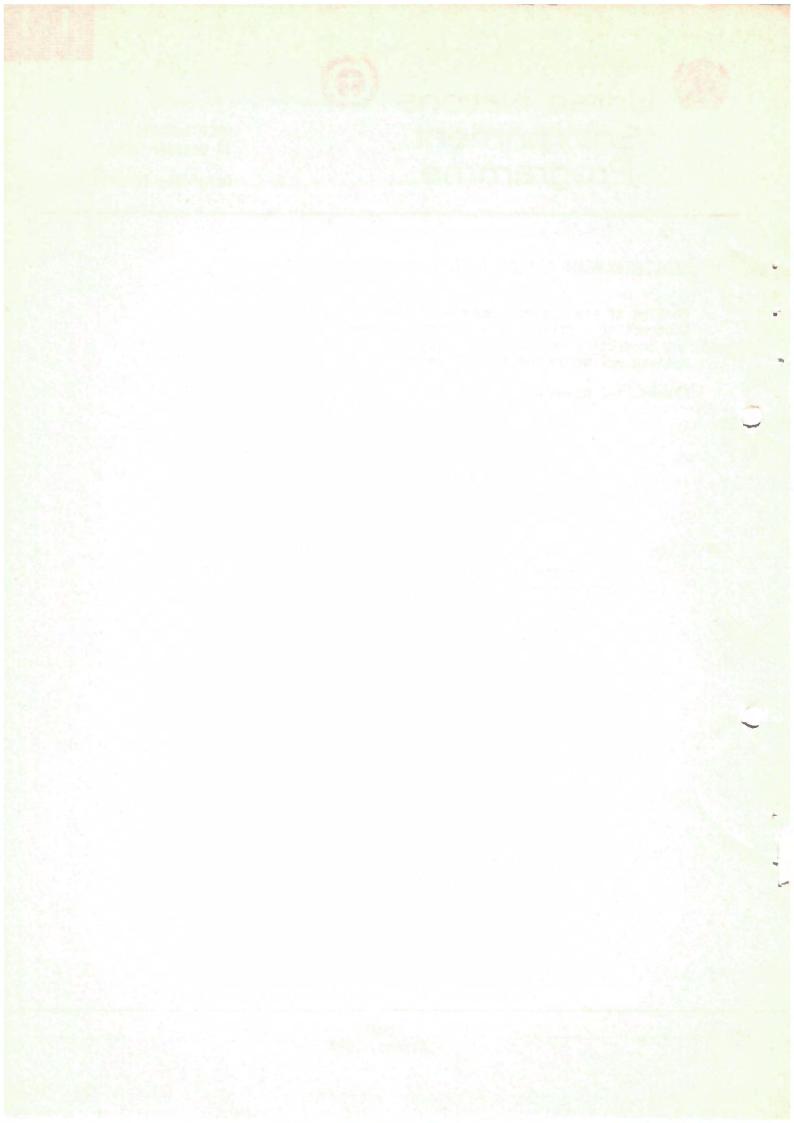
Original: ENGLISH

#### MEDITERRANEAN ACTION PLAN

Meeting of the Expanded Bureau of the Contracting Parties to the Convention for the protection of the Mediterranean Sea against pollution and its related protocols

Athens, 1-2 November 1988

Preliminary Ideas of the Executive Director on the Refocusing of the Mediterranean Action Plan on environmentally sound integrated planning and management of the Mediterranean Basin



#### Table of Contents

INTRODUCTION

GENERAL

REVIEW OF ACTION PLAN COMPONENTS

MED POL
Blue Plan
Priority Actions Programme
Regional Oil Combating Centre
Specially Protected Areas
Information and public awareness

#### STRATEGY FOR REFOCUSING

General principles
Programme implementation
Institutional arrangements
Financial arrangements

#### RECOMMENDATIONS FOR ACTION OF THE BUREAU

- ANNEX I. TERMS OF REFERENCE OF THE BUREAU
- ANNEX II. TERMS OF REFERENCE OF THE SCIENTIFIC AND TECHNICAL COMMITTEE
- ANNEX III. TERMS OF REFERENCE OF THE SOCIO-ECONOMIC COMMITTEE
- ANNEX IV. TERMS OF REFERENCE OF THE REGIONAL ACTIVITY CENTRE FOR EMERGENCY RESPONSE
- ANNEX V. TERMS OF REFERENCE OF THE REGIONAL ACTIVITY CENTRE FOR PRIORITY ACTIONS PROGRAMME.
- ANNEX VI. TERMS OF REFERENCE OF THE REGIONAL ACTIVITY CENTRE FOR THE SPECIALLY PROTECTED AREAS.
- ANNEX VII-PRINCIPLES FOR ESTABLISHMENT AND OPERATION OF REGIONAL ACTIVITY CENTRES AND REGIONAL PROJECT CENTRES.

#### INTRODUCTION

- 1. The Fifth Ordinary Meeting of the Contracting Parties considered the Policy recommendations of the Executive Director contained in document UNEP/IG.74/3/Add.2. After an extensive discussion, it invited the Bureau to carry out an analytical study of the Executive Director's proposals concerning the re-focusing of the Mediterranean Action Plan (UNEP/IG.74/5, Section II, A.2).
- 2. To restate the rationale for this exercise, the Executive Director feels that the Action Plan still lacks a clear long-term strategy on how to achieve its main goals and that, as a result, it may be spreading its resources and activities in too many directions and without concentrating on issues crucial for the protection of the Mediterranean. This hampers the Action Plan from becoming the main instrument of a joint co-ordinated policy of the Mediterranean Governments in matters dealing with the environmental protection of the Mediterranean Sea and of the coast of the Mediterranean basin.
- 3. The present document contains a further elaboration of the Executive Director's ideas about the proposed refocusing of the Action Plan, taking into account the present status and possible future development of the individual Mediterranean Action Plan components, refers to other programmes closely related to the objectives of the Action Plan, describes the strategy which could be applied to achieve the refocusing, and expresses in tentative form the institutional and budgetary implications of the proposed refocusing.
- 4. The document is submitted to the meeting of the Expanded Bureau as a contribution to the analytical study which the Bureau has been asked to carry out on behalf of the Contracting Parties.
- 5. The comments and suggestions expected to be received from the Expanded Bureau will be used by the secretariat as guidance for the implementation of the 1989 workplan. They will also be used by the Executive Director to prepare for the consideration of the Bureau's next meeting and for the final approval of the sixth meeting of the Contracting Parties the programme and budget for the biennium 1990-1991, reflecting the approved overall strategy and the adaptation in existing programme elements and institutional structures needed to achieve the refocusing of the Action PLan on its initial central goal.

#### GENERAL

6. The proposed refocusing of the Mediterranean Action Plan finds its basis in UNEP's policy on environmental and resource management. The proposal is in line with the decision of the Intergovenmental Meeting on the Protection of the Mediterranean (Barcelona, 28 January - 4 February 1975) to include the "integrated planning of the development and management of the resources of the Mediterranean Basin" as one of the central objectives and cornerstones of the Action Plan (UNEP/WG.2/5).

- 7. Environmental and resource management concerns constitute a system. It is not only that life-processes are inter-connected, but that the seamless web spun by modern channels of trade, communications, transport, tourism, health and coastal zone development have led to the merging of the inter-connections into the very texture of economic and social life. In this situation, it is not productive to approach the system in a partial or fragmentary manner. A truly integrated approach is called for to meet a complex reality.
- 8. The integration of environmental and resource management policies with policies dealing with coastal zone development should be based on the identification of complementary objectives and the use of policy instruments that are at once mutually compatible and individually efficient (i.e. economically cost-effective). In this way mutual benefits could be realized and wherever possible deliberate and well-considered trade-offs effected between competing environmental and sectoral objectives. To illustrate in terms of a specific sector (coastal zone development), this means that formulation of macro-economic policies must take into account from their conceptual stage, the net impact of such policies on environmental quality and the natural resource base of the country just as environmental policies, from their inception, must take account of the potential impact on the management and planning of coastal zone development, tourism, etc. their output, incentive systems and profits. Resource management concerns can, thus, be integrated into the process of development decision-making.
- 9. In order to overcome the constraints, it is necessary to identify, evaluate and put into place appropriate mechanisms, be they institutional, technological or policy-related, to make environmental and coastal zone development policies mutually supportive and re-enforcing in the long run. It is only in this way that the issues of sustainability in the overall development in the Mediterranean Basin countries can be brought into focus and appropriate remedies sought. There is a growing consensus that the tasks, although complex, are manageable, but they need managing.
- 10. There has been emerging in recent years in the Mediterranean region, as elsewhere, a new agenda of environmental problems centrally occupied with the life-supporting systems of the biosphere: forests, coastal waters and oceans, soils and wetlands, quality and quantity of water resources, etc. All these are now coming under stress and the critical biogeochemical cycles are being affected. The slow but inevitable impact of expected climatic changes (sea level and temperature rise, changes in precipitation pattern, etc.) will certainly be a major factor which requires an early attention in order to avoid or mitigate its negative consequences. In contrast to the earlier generation of environmental concerns the new agenda with its emphasis on productivity and sustainability of natural resources and the environment brings the relationship between natural resources and coastal zone development more sharply into focus. As the Mediterranean countries strive to cope with problems that arise from the marked loss of productivity of ecosystems (loss of productive land, loss of trees, loss of quantity and quality of water, loss of fisheries and ocean resources) counter-pointed by the increased stress generated in the South by rapid population growth, the effects of ill-planned socio-economic policies, the lack of appropriate institutional settings, the rising impact of technology, and in the North by the rising levels of pollution, acid rain, fouled air, toxic chemicals in lakes and rivers, the accent is inevitably and increasingly on the management of economically critical natural resources and on fragile ecosystems. In the process the

complementarity of the goals of economic growth and environmental protection becomes manifest.

- ll. In dealing with the environment and natural resources, anticipation and prevention is always more effective, and less costly, than curative measures. In the present situation, it is imperative that Mediterranean countries take early action to reduce the future burden on themselves. It is in this context that the main message of the Brundtland Commission Report must be understood, namely, that sustainable development depends upon each nation achieving its economic growth and security, while at the same time enhancing the environmental and natural resource base upon which that security must eventually depend.
- 12. There must be co-operation amongst the countries of the region for an effective sharing of data and information, a comparison of technical options available, harmonization of socio-economic policies to the extent they impinge upon one another and institutional modifications to remove possibilities of contradiction or conflict. Such an approach could produce a number of significant advantages:
- shared specialized knowledge and technology;
- learning from one another's mistakes;
- shared resources and facilities;
- possible realization of economies of scale.

Most important of all they will be able to respond jointly (and therefore effectively) to common problems.

- 13. In order to obtain these benefits, however, the regional programme must be integrated in terms of both its conceptual bases and operational context so that the different components move in step towards shared objectives.
- 14. It will be seen that an integrated regional programme is neither easy to design nor to co-ordinate. Many difficulties (lack of national data and information, differences in analytical approaches to conservation of resources and enhancement of environmental quality problems, incentive systems, institutional setting, nature and effectiveness of environmental machinery, deficiencies in environmental legislation, etc.) have to be overcome but a framework strategy can be put into place on the basis of approaches to regional programmes developed in recent years and successfully applied in other regions of the world.

#### REVIEW OF MEDITERRANEAN ACTION PLAN COMPONENTS

15. The following sections contain a brief presentation of the status of each Action Plan component with particular emphasis on elements which could contribute to re-focusing on integrated coastal zone planning and management.

#### MED POL

16. The general long-term objective of MED POL is "to further the goals of the Barcelona Convention by assisting the Parties to prevent, abate and combat pollution of the Mediterranean Sea area and to protect and enhance the marine environment of the area". One of the specific objectives of MED POL is to provide information "which could be used in formulating environmentally sound national, bilateral and multilateral management decisions essential for the continuous socio-economic development of the Mediterranean region on a sustainable basis". Those objectives are achieved through the evaluation of

information on sources, amounts, levels, trends, pathways and effects of pollutants, which will be collected, analyzed and reported on a systematic basis using commonly agreed upon methods, and taking into account data available from other sources.

- 17. At present, MED POL has three clearly identified components:
  - monitoring of pollution sources; the levels and impact of pollutants on coastal waters and reference areas; transport of pollutants through the atmosphere; in support of this component, there is a programme of technical assistance (preparation of reference methods, intercalibration of analytical techniques and data quality control programmes, maintenance of instruments, provision of equipment, fellowships and training programmes).
  - research in support of monitoring;
  - preparation of assessments of pollution by individual substances and formulation of pollution control measures (i.e. environmental quality criteria, emission standards or other measures) needed for the implementation of the Protocol of the Mediterranean Sea against Pollution from Land-based Sources.
- 18. The Secretariat is presently engaged in an internal review of the monitoring activities, which would be presented to the Contracting Parties in 1989. This review will cover the quality of data gathered through the monitoring programme, spatial and temporal coverage, parameters measured and above all will propose changes which are necessary in order to reach the objectives set by the Contracting Parties. The research activities are also being reveiwed in order to bring them closer to their main objective, i.e. to serve as the main source of scientific information for the assessment of the environmental quality of the Mediterranean Sea and for the preparation of proposals for pollution control measures.

#### Blue Plan

- 19. The Blue Plan has highlighted two aspects of the environmental development problem:
  - interdependence between sectors and/or components which initially appeared independent;
  - interdependence between different levels international, national, regional and local.
- 20. The Blue Plan has identified and analyzed the major issues that will affect the future Mediterranean pollution and quality of coastal areas (population trends, energy policies, urbanization, transport networks, spatial distribution of industry).
- 21. It shows in particular that protection of the Mediterranean Sea, its shores and coastal regions cannot be assured through action carried out on the sea alone, or its coastal regions alone, but depends largely on the development, environment and physical planning policies followed by the Mediterranean countries at the national level. It also depends on economic and commercial interactions between these countries as a whole and the rest of the world in the agriculture, industry, energy, tourism and

transport sectors. In this respect, the scenarios confirm the validity of analyses carried out in other studies, such as the report of the World Commission of Environment and Development or "UNEP's Environmental Prospectives up to the Year 2000 and Beyond".

- 22. The various scenarios envisaged, whether they are based on the continuation, more or less enhanced, of current trends (the so-called "trend" scenarios), or on a more goal-oriented alignment of Mediterranean co-operation, at the level of both the environment and development (the so-called "alternative" scenarios), lead to "images" of the Mediterranean environment that do not radically differ at the 2000 horizon, very close to the present and virtually already determined. Whatever the scenario, up to this date the situation will in principle be kept more or less under control in most countries through contingency action, provided that declared policies and stipulated regulations are in fact implemented. However, the scenarios for the 2025 horizon (in less than 40 years, i.e. the same span as from 1950 to 1988) indicated that the situation may change radically and that the state of environment is likely to deteriorate considerably. Given the time lag needed to obtain significant effects from environmental protection, policies more vigorous than the current ones must be decided upon and implemented here and now if the serious shortages and irreversible degradation threatening the future of the Mediterranean are to be avoided or attenuated, particularly concerning soil, water, forests, the coast and urban environments.
- 23. More specifically, the exercise implies that, in any event even in the most favourable scenarios protection of the land and coastal strip will be very difficult in the long run because of growing human pressures and the vulnerability of the natural environment. This will generally be the case in the regions south and east of the basin, but also all along the urbanized coasts of the northern region. This problem will, therefore, require the continuous and unswerving determination of governments and public authorities, based on the active and lasting support of the populations concerned. The most favourable scenarios in fact imply a permanent mobilization on behalf of the environment.
- 24. The Blue Plan scenarios show that the region's environment will be subject to increasingly strong pressure, but that ways exist to reduce considerably the effects of these constraints and to reverse the most adverse trends.

  Among these options, the most important ones seem to be:
- the search for new patterns of development in the region, based on stronger intra-Mediterranean co-operation and more resolute North-South solidarity;
- the systematic consideration of the environment in all sectors of development, in particular at the level of coastal areas;
- the promotion of a better understanding of the interactions between development and the environment in the Mediterranean, leading to the adoption of new kinds of behaviour among national or local officials from both the public or private sectors and among the Mediterranean peoples.
- 25. In conclusion, the Blue Plan exercise clearly indicates the need for greater emphasis on the planning and management of coastal areas as the best approach to mitigate the present and future environmental problems of the Mediterranean Basin.

#### Priority Actions Programme (PAP)

- 26. PAP has been implementing 10 priority actions relative to integrated planning of coastal areas; water resources management; historic settlements; seismic risk mitigation; solid and liquid wastes management; soil protection against erosion; development of tourism harmonized with the environment; environmental management of aquaculture; application of renewable energy sources; and environmental impact assessment.
- 27. Several national centres have assumed regional responsibility for specific programme components (e.g. the Genoa Centre on Seismic Risk Reduction in coastal areas; the Training Centre on Solar Energy in Almeria).
- 28. As a special activity, in 1987 complex country pilot zone projects were initiated in particularly threatened coastal zones, aiming at integrated planning management. Such projects were started in Syria ((coastal zone), Turkey (Bay of Izmir), Yugoslavia (Bay of Kastela), and in Greece (Rhodes). So far, PAP has developed a wide range of experiences, demonstration studies, methodological documents, tools and techniques that are readily applicable to pilot project areas.
- 29. The country pilot projects are expected to contribute to the improvement of the state of the environment in selected coastal areas, to serve as demonstration projects for areas with similar environmental problems and to result in:
  - co-operation of local and national institutions with Mediterranean experts and istitutions, as well as with international organizations;
  - establishment and promotion of an environmentally sound management of natural resources;
  - proposals suitable for seeking international financial support developed at relatively low cost;
  - testing the experience gained in developing the individual activities of the Priority Actions Programme;
  - training of local experts, which in turn may become resource personnel for pilot projects carried out in other Mediterranean States.

#### Regional Oil Combating Centre

- 30. The risk of marine pollution by oil and other dangerous substances transported by ships, remains very serious in the Mediterranean and many areas are potentially at risk.
- 31. The Regional Oil Combating Centre has developed, over the years, a network of national correspondents, a core of trained officials (through its MEDEXPOL INFOPOL, MEDIPOL and national training courses), guidelines for oil combating, catalogues of equipment and assisted governments in developing national contingency plans.

#### Specially Protected Areas

32. In the field of specially protected areas, with vitally important input from IUCN, the concentration is on identification of all areas expected to be covered by the provisions of the Protocol concerning Mediterranean Specially Protected Areas. Until now:

 a Directory of existing protected areas of the Mediterranean was prepared;

 guidelines have been formulated and adopted for the selection, establishment, management and notification on marine and coastal protected areas;

working groups have been established concerning the selection of protected areas, the management of marine vegetation, the legislation for protected areas, the submarine archaeology and threatened species.

33. In addition, a review of the status and problems of the Mediterranean monk seal was organized and a special action plan for the protection of the monk seals was adopted in 1988.

#### Information and public awareness

34. Considerable efforts were made, mainly on the level of the Secretariat, to spread the information and raise public awareness about the environmental problems of the Mediterranean and about the Action Plan. Posters, sticker, popular booklets, films, exhibitions, press conferences and press releases, presentation of MAP at various scientific, technical and other meetings were the means by which the public at large, politicians, managers and scientists were reached with information about the Action Plan.

#### STRATEGY FOR REFOCUSING

#### General principles

- 35. The proposed strategy for refocusing would be based on past achievements and on the present status of all ongoing activities, as well as on existing organisational structures and mechanisms of the Action Plan.
- 36. None of the ongoing activities of the Action Plan would be terminated. The refocusing would aim at the adaptation, through further development, and progressive concentration of ongoing activities on issues crucial to environmentally sound integrated planning and management of the Mediterranean Basin, i.e. on the central objective defined in 1975 by the Governments when adopting the Action Plan.
- 37. The targets defined by the Genoa Declaration would be fully integrated into the strategy and programme proposed for future development of the Action Plan.
- 38. Co-operation would be strengthened between the Action Plan and other national and international activities relevant to its goals, particularly with programmes having a bearing on integrated coastal zone development and management. Such co-operation would also enhance the present involvement and participation of the United Nations Specialized Agencies in those aspects of the Action Plan relevant to their acknowledged sphere of competence, and of other relevant organizations with whom UNEP has regular links (FAO, WHO, UNESCO, IOC, WMO, IMO, IAEA, IUCN.)

- 39. Only minor adjustment are suggested in the structure of the programme adopted at the fifth meeting of the Contracting Parties for the 1988-1989 biennium, since it is expected that the refocusing could be initiated in 1989 through contributions from existing components of the Action Plan with gradual shift of emphasis towards activities relevant to coastal zone planning and managment, specifically focusing on the "country pilot zone" type of activitities under the direct co-ordination of the Co-ordinating Unit.
- 40. However, consideration may be given by the sixth meeting of the Contracting Parties to the possible need for restructuring of the programme from 1990 onwards, taking into account the experience and results gained during 1989 in refocusing the programme, as well as the advantage which may have been gained with suggested changes in the institutional arrangements.

#### Programme implementation

- 41. By 1990, the scenarios developed in the framework of the Blue Plan for the Mediterranean as a whole should be examined by the Contracting Parties, as the likely common theoretical framework for the environmentally sound integrated planning and management of the Mediterranean Basin.
- 42. Using these scenarios as background, the Contracting Parties should endeavour to prepare, or to complete the preparation of their national scenarios by 1991. By comparing the findings of the national scenarios with those dealing with the Mediterranean Basin as a whole, the validity of the latter should be verified and their conclusions modified, as appropriate.
- 43. Increased attention should be given to the analysis of problems which may arise from the expected climatic changes due to projected sea level and temperature changes. Response options to the deleterious consequences of these changes should be considered by the Contracting Parties, and a feasible programme of mutual assistance should be developed to counteract or mitigate these consequences.
- 44. The number of country pilot zone projects on integrated coastal zone planning and management should be increased to ten by the end of 1991, and their development should be intensified. Such projects should be used as concentration areas for all components of the Mediterranean Action Plan, and specifically for the targets identified by the Genoa Declaration. The experience gained through the pilot projects should serve to demonstrate the significance of the principles underlying the Barcelona Convention and the Action Plan. The projects should not be seen as activities of purely national character, but as interlinked centres for regional co-operation, generating experience, transfer of information and training opportunities of regional significance.
- 45. While maintaining their broad spectrum and regional character, activities identified as part of the Priority Actions Programme (PAP), should concentrate on geographic areas covered by the country pilot zone projects, and on activities such as environmental impact and damage assessment (one of the targets identified by the Genoa Declaration), and integrated planning and coastal zone management. The activities carried out in the general framework of PAP are seen as being of paramount importance for the successful refocusing of the Action Plan. The results and experience gained through individual activities should be applied within each of the country pilot zones, and methodologies developed and tested through these activities should be widely applied through intensive on—the—job training programmes which would become integral parts of each country pilot zone project.

- 46. Gradual but progressive concentration of MED POL monitoring on contaminants and sites which require either long time series of data (e.g. persistent, non-degradable, airborne or non-point source contaminants) or specific, almost "real time" information (e.g. sanitary quality of bathing waters, contaminant levels in domestic and industrial effluents). The former are required for assessment of long-term trends in the quality of the Mediterranean environment and for the design of long-term pollution control strategies; the latter would be used by those in charge of ensuring compliance with agreed standards for application of day—to—day pollution control measures, such as closing of unsatisfactory beaches or imposing restrictions on release of effluents.
- 47. MED POL research should concentrate on subjects requiring better understanding of the cause and extent of a well identified or potential local or regional problem (e.g. methylmercury, plankton blooms). Such research may have to be supported by pilot monitoring programmes on strategically placed monitoring stations and may have to be combined with studies presently covered by MED POL only marginally (e.g. dietary habits, epidemiological studies). In all cases, MED POL research should be intimately linked to and, as appropriate, dependent upon relevant research and studies performed within the framework of other programmes, both international and national.
- 48. The main goal of the activities envisaged in the framework of MED POL should be to provide information leading to the formulation of suitable site—specific and common measures required for the effective application of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land—based Sources. The formulation of site—specific pollution control measures in the zones covered by the country pilot projects should be considered as priority in designing the national MED POL research and monitoring programmes.
- 49. The response capability of the Action Plan to maritime and land-based emergency situations covering all types of hazardous substances should be enhanced. This should involve the formulation and adoption of national contingency plans by the Contracting Parties which still do not have such plans and development of arrangements for co-ordinated response to emergencies requiring regional co-operation, specifically those envisaged by the Protocol concerning co-operation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency. The development of specific local response capabilities in zones covered by the country pilot zone projects on integrated coastal zone planning and management should be especially promoted.
- 50. The work on the establishment of protected areas should be itensified along the provisions of the Protocol concerning Mediterranea Specially Protected Areas in order to reach the target of 50 new areas by 1995, set by the Genoa Declaration. Likewise, early action should be taken to protect the most endangered species from extinction, monk seals and marine turtles specifically, as requested by the Genoa Declaration.
- 51. Aside from numerous national programmes a large number of regional and sub-regional initiatives and ongoing programmes relevant to the Action Plan are at present flourishing in and around the Mediterranean without any significant links and consultations with the Action Plan (e.g. the EEC's and the World Bank's Mediterranean programme, Alpe/Adria, RAMOGE, POEM, the Italian-Greek and the Italian-Yugoslav joint Mediterranean programmes). Most of these initiatives and programmes are in the field of integrated coastal

zone planning and management and the financial resources at their disposal are often far surpassing those at the disposal of the Action Plan. In view of their relevance to the Action Plan it is suggested to establish a regular consultative process between the Action Plan and these programmes in order to ensure a better flow of information between then and to examine the possibilities for a closer co-operation in areas of mutual interest.

- 52. The complex nature of country pilot zone projects will open the possibility for an expanded involvement of specialized international and intergovernmental organizations in the Action Plan. In that context the early association of organizations such as UNDP and the World Bank with the pilot zone projects should be actively pursued, since these projects will, in most cases, require follow-up from international lending or funding institutions.
- 53. The specialized data bases, set up in the framework of Regional Activity Centres of the Action Plan, should be functionally linked up with the data bases maintained by the Co-ordinating Unit, which should act as the data management centre for all information generated by, or relevant to the Action Plan.
- 54. Training of experts in all fields covered by the Action Plan should be intensified, with special emphasis on training of nationals from developing countries and in subjects relevant to coastal zone planning and managment. On site training, especially by participation in country pilot projects, seems a promising avenue.
- 55. In view of the important role of the information and public awareness campaigns (recognized by the Genoa Declaration), efforts should be intensified to reach politicians, decision-makers, managers, scientists and the public at large with information on the environmental problems of the Mediterranean and the Action Plan, as the joint effort of the Contracting Parties to safeguard the quality of the Mediterranean Basin. All available means should be used for publicizing the Action Plan. In addition to the continuation of previous efforts in this sector, a more agressive and imaginative approach should be adopted, which may also include, individually or in a closely co-ordinated way, fund raising campaigns, celebration of the Mediterranean Week at the occasion of the Environment Day with symbolic awards to meritorious persons, annual issuance of national stamps devoted to the Mediterranean (only one was issued until now, by Monaco), poster contests, adoption of a suitable logo for the Action Plan and a symbol for the plight of the Mediterranean (monk seal?), Enlisting prominent public personalities in a "Friends of the Mediterranean" association and using them as ambassadors of goodwill may be considered promising. Approach to children, teachers, pupils, tourists and especially non-governmental organizations, largely neglected until now, should be initiated with appropriate information material.
- 56. The existing co-operation with the Inter-Parliamentary Union should be broadened and a more active involvement of the Union in propagating the political support for the Action Plan should be solicited.

#### Institutional arrangements

57. The periodic (biennial) meetings of the Contracting Parties should remain the highest authority to review the overall progress of the Action Plan and to decide on its general orientation and budget. The Parties should meet on high (ministerial) level, their meetings should be short (2-3 days) and their decision—making should be facilitated by appropriate preparatory work.

- 58. The Bureau of the Parties should play a key role in the decision-making process between the periodic meetings of the Parties and in the preparation of the meetings of the Parties. A procedure should be adopted to ensure an equitable distribution of the posts in the Bureau and an orderly rotation of its membership, taking into account the interest of all Parties.
- 59. The terms of reference of the Bureau should be expanded in order to include specific provisions related to the financial management of the Action Plan, as decided by the fifth meeting of the Contracting Parties. The proposed expanded terms of reference are attached as Annex I of this document.
- 60. The two standing committees (Scientific and Technical Committee, Socio-Economic Committee), established by the fifth meeting of the Contracting Parties, should be retained and should exercise their functions according to the terms of reference proposed in Annexes II and III of this document.
- 61. The Legal Committee should be convened only on an <u>ad hoc</u> basis, subject to specific decisions of the Contracting Parties, and according to terms of reference specified by the Parties.
- 62. The National Focal Points for the Mediterranean Action Plan should remain the main channels of communication between the Secretariat and the relevant countries on all matters related to the development and implementation of the Action Plan. For specific individual activities and projects additional, technical National Focal Points should be identified by the National Focal Points for the Mediterranean Action Plan.
- 63. In order to ensure a full and effective co-ordination of national activities relevant to the Action Plan, National Committees for the Mediterranean Action Plan should be established by every Contracting Party. The National Committees should be headed by the National Focal Points for the Action Plan. The National Committees should include representatives of national administrations and institutions relevant to the Action Plan, in particular those involved in co-ordination of specific components of the Action Plan at national level.
- 64. For the sake of a better co-ordination, all correspondence on policy matters as well as on matters relevant to the work and meetings of the two standing committees should be only between the National Focal Points for the Action Plan and the secretariat. Correspondence of technical nature related to specific components or projects of the Action Plan should continue to be directly between the Secretariat and the institutional centres established in the framework of the Action Plan (e.g. ROCC, the Regional Activity Centres) on one side and the relevant national sectoral focal points designated by the national focal points for the Action Plan.
- 65. The Co-ordinating Unit for the Mediterranean Action Plan in Athens should remain and operate under the authority of the Executive Director and within the mandate and decisions of the Contracting Parties, as the defacto secretariat and the overall technical co-ordinator of the Action Plan and the Convention. In order to ensure that the country pilot zone projects on integrated coastal zone planning and management become concentration areas for all components of the Action Plan and for the targets identified by the Genoa Declaration, the co-ordination of such projects is proposed to be exercised directly by the Co-ordinating Unit. The structure of the Unit's staff may have to be adjusted so that it could respond adequately to the requirements of this task.

- 66. The status of the Regional Oil Combating Centre (ROCC) in Malta should be re-examined. The Centre is now operated by IMO as a joint IMO/UNEP project under the authority and according to the policy decision of the Contracting Parties, as well as under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan. The staff of ROCC is recruited by IMO and they have the status of UN employees. In spite of efforts, since 1976, of the Secretariat and of IMO, the Government of Malta has not signed yet the Headquarters agreement required for the legal operation of ROCC as a UN institution, and has recently announced that ROCC would have to be moved to another, unspecified location. In view of the above, as well as of the present low cost-effectiveness of ROCC (66 per cent of the budget is for personnel expenses; Malta contributes, in kind, only 5 per cent towards the ROCC budget) and in particular of the expected broadening of ROCC's initial mandate (see paragraph 49), the Contracting Parties may wish to consider the advantages of transforming the ROCC into a Regional Activity Centre or to transfer its function to the Co-ordinating Unit in Athens, with adequate strengthening of the Unit's staff. Both alternatives would result in considerable savings and would ensure a better integration of activities performed by ROCC with the other components of the Action Plan. Should the Contracting Parties decide to maintain the present arrangements supporting ROCC, the role of the Centre and the scope of its activities should be redefined in order to accommodate the proposed expansion of programme requirements relevant to maritime emergencies (see paragraph 49), the targets specified in the Genoa Declaration, as well as the needs of the proposed refocusing of the Action Plan on integrated planning and management of the Mediterranean Basin. In all these activities close co-operation should be established between the Centre and UNEP's International Register for Potentially Toxic Chemicals (IRPTC). The proposed redefined terms of reference of the Centre, with suggested new name reflecting the scope of its activities, are attached as Annex IV of this document.
- 67. The Regional Activity Centre for the Priority Actions Programme in Split and for the Specially Protected Areas in Tunis should remain to operate as national institutions entrusted by the Contracting Parties with special regional responsibilities. The work of the Centres related to the Action Plan should be carried out under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan, with financial support provided through UNEP on a project funding basis in the framework of the budget approved by the Contracting Parties. The role of the Centres and the scope of their activities should be adjusted in order to accommodate the proposed refocusing of the Action Plan and the targets specified in the Genoa Declaration. The proposed adjustments are reflected in the terms of reference attached as Annexes V and VI to this document. A recent in-depth analysis of the Regional Activity Centre for the Specially Protected Areas reconfirmed that, in spite of certain weeknesses, mainly related to the insufficient support from the host Government, the Centre is a viable organizational unit able to fulfil its tasks, provided that the identified shortcomings are remedied and the continuing support of IUCN is maintained.

- 68. The Regional Activity Centre for the Blue Plan will terminate its activities with the completion of the third phase of the Blue Plan and the results of its past activities will become a fundamental input into the refocused programme of the Action Plan (see paragraphs 19-25). However, the goodwill and readiness of France to provide a national institution which could play a regional role in one of the major programme areas of the Action Plan should be explored.
- 69. Although it is proposed that the Co-ordinating Unit for the Mediterranean Action Plan should remain in charge of overall technical co-ordination of the Action Plan, further decentralization is proposed by establishment of additional Regional Project Centres for specific programme areas of the Action Such centres in fact already exist for some specific larger regional projects which, at least partly, are "spin-offs" of successful initiatives of the Regional Activity Centre for the Priority Actions Programme (e.g. the Centre on Seismic Risk Reduction in Coastal Areas, Genoa; the Training Centre on Solar Energy, Almeria; the Mediterranean Regional Aquaculture Project -MEDRAP, Tunis) and of MED POL (the Intercalibration and Maintenance Services at IAEA/ILMR, Monaco; the Jellyfish Monitoring and Research Project Centre, Trieste). Additional programme areas which could be handled through such projects include rehabilitation and reconstruction of historic settlements (identification and protection of at least 100 historic sites of common interest is a target identified by the Genoa Declaration), water resource development for Mediterranean islands, solid and liquid waste management, tourism, development of response options to counter the effects of expected climatic changes, identification and protection of Mediterranean biodiversity and genetic resources, implementation of an action plan for the protection of Mediterranean monk seal and marine turtles. Depending on the type of activities of the Regional Project Centres, they would be functionally linked to and supervised by the existing Regional Activity Centres or the Co-ordinating Unit.

70. The benefits from the proposed establishment of Regional Project Centres would be manifold:

- the pressure on the staff of the Co-ordinating Unit resulting from direct implementation and supervision of a large number of activities would be decreased, thus leaving the staff more time to exercise the primary function of the Unit, i.e. co-ordination and guidance;
- the pressure on existing Regional Activity Centres would be also decreased leaving them more time for concentration on their basic activities and on development of new initiatives;
- the number of national institutions and experts directly involved and committed to the implementation of the Action Plan would be significantly increased;
- the flexible and more informal approach of the projects towards the co-operative arrangements with their partners, not bound too rigidly by UN rules, may successfully stimulate a larger number of institutions and individuals to participate actively in the Action Plan;
- additional contributions to the activities of the Action Plan would be received in kind and services, without increasing proportionately the expenditures from the Trust Fund.

- 71. The present support to the existing Regional Activity Centres from the Trust Fund is not harmonized, leaving them to operate under very different financial constraints. Regardless of the decision of the Contracting Parties about the proposed establishment of the Regional Project Centres, a unified approach would be needed and certain principles which may be considered for approval by the Contracting Parties as valid for both, the Regional Activity Centres and for the Regional Project Centres, are proposed in annex VI of this document.
- 72. The Mediterranean Basin is increasingly used by the citizens from States which are not Parties to the Barcelona Convention as their traditional tourist and recreational zone. In addition, an increasing number of citizens from these States choose the Mediterranean coast for their permanent or temporary residence. In view of these links, and the concomitant burden placed on the environment of the Mediterranean Basin, the time has probably come for the Contracting Parties to consider the advantage of applying the provision of the Convention which allows States without direct physical access to the shores of the Mediterranean Sea to become parties to the Convention.

#### Financial arrangements

- 73. The proposed refocusing of the Action Plan would require gradual adjustments in the budgets of existing individual components of the Action Plan and the introduction of the coastal zone planning and manageent as a new programme and budget component of the Action Plan.
- 74. Only minor adjustments are suggested for the present budgetary period (1988-1989) approved by the fifth meeting of the Contracting Parties, assuming that the refocusing could be initiated through the contribution of existing components of the Action Plan with gradual shift of emphasis towards activities relevant to coastal zone planning and management.
- 75. However, it is suggested that from 1990 onwards the refocusing should be clearly reflected in the budget structure expected to be adopted by the sixth meeting of the Contracting Parties.
- 76. The budgetary implications needed to suport the proposed refocusing in the period 1990-1991 will be presented to the next meeting of the Bureau and will be based on the assumption of annual increase of 10 per cent in the budget of the Action Plan. It is intended to include in the 1990-1991 budget a new "country pilot zone projects" budget component which would cover also the MED POL, ROCC, Priority Actions Programme and Specially Protected Areas type of activities carried out in the pilot zones, thus forcing by financial means the co-ordinators of these activites to co-operate on an integrated approach to coastal zone planning and management. Training would not be shown as a separate budget component as it should be an integral part of each programme activity.
- 77. Experience has shown that the financing remains a very critical element of the Action Plan. Agreements on objectives, workplans and budgets, painstakingly achieved at meetings of Contracting Parties, are in practice radically modified by delays, often lasting for years, in payment of contributions pledged. Mechanisms will have to be found to remedy this situation of chronic shortage of funds that primarily affects activities of interest to developing countries, since no savings can be made on fixed costs of offices, staff and intergovernmental meetings.

#### RECOMMENDATIONS FOR ACTION OF THE BUREAU

#### 78. The Bureau is invited

- a) to consider and provide comments on the Executive Director's ideas on refocusing of the Mediterranean Action Plan on environmentally sound integrated planning and management of the Mediterranean Basin, offered as a contribution to the analytical study requested from the Bureau by the fifth meeting of the Contracting Parties;
- b) to provide the Executive Director with recommendations about the future course of action in order to achieve the refocusing of the Action Plan on environmentally sound integrated planning and management of the Mediterranean basin.

#### Annex I

#### TERMS OF REFERENCE OF THE BUREAU

The Bureau of the Contracting Parties, composed of representatives of four Contracting Parties, is elected by the ordinary meetings of the Contracting Parties according to the rules laid down by the meeting of the Parties.

The functions of the Bureau are:

- to review in periods between the meetings of the Contracting Parties the progress in the implementation of the Action Plan, the Convention and its associated Protocols, with special reference to the decisions taken by the meetings of the Contracting Parties;
- to supervise the work of the secretariat and to provide it with necessary guidance in the implementation of the programme and budget adopted by the meetings of the Contracting Parties;
  - to follow the work carried out by the standing subsidiary bodies of the Contracting Parties (i.e. the Socio-Economic Committee, and the Scientific and Technical Committee) and of the institutional structures established in the framework of the Action Plan (i.e. the Co-ordinating Unit, the Regional Activity Centres and the Regional Project Centres);
- to guide the secretariat about the preparations for the meetings of the Contracting Parties;
- to take decisions about programme and budget adjustments within the mandate given to the Bureau by the members of the Contracting Parties;
- to decide on response of the Action Plan in case of eventual emergency situations.

The Bureau discharges its functions during periodic meetings chaired by its Chairman elected by the meetings of the Contracting Parties. Between meetings of the Bureau, it functions through a consultative process involving all Bureau members.

#### Annex II

#### TERMS OF REFERENCE OF THE SCIENTIFIC AND TECHNICAL COMMITTEE

The Committee consists of representatives of the Contracting Parties designated by the National Focal Points for the Mediterranean Action Plan.

The functions of the Committee, acting as the subsidiary body of the Contracting Parties, are:

- to review the progress in the implementation of scientific and technical programmes of the Action Plan;
- to review the workplans and budgets proposed by the secretariat for the scientific and technical programmes of the Action Plan and to recommend their adoption, with modifications, as deemed necessary, to the meetings of the Contracting Parties;
- to take decisions about the adjustments in the programmes and budgets of the scientific and technical components of the Action Plan, within the mandate given to the Committee by the Contracting Parties;
- to keep informed about the progress in the implementation of the social and economic programmes of the Action Plan in order to ensure a harmonious and mutually reinforcing development of all components of the Action Plan.

#### Annex III

#### TERMS OF REFERENCE OF THE SOCIO-ECONOMIC COMMITTEE

The Committee consists of representatives of the Contracting Parties designated by the National Focal Points for the Mediterranean Action Plan.

The functions of the Committee, acting as the subsidiary body of the Contracting Parties, are:

- to review the progress in the implementation of the socio-economic programmes of the Action Plan;
- to review the workplans and budgets proposed by the secretariat for the socio-economic programmes of the Action Plan and to recommend their adoption, with modifications, as deemed necessary, to the meetings of the Contracting Parties;
- to take decisions about the adjustments in the programmes and budgets of the socio-economic components of the Action Plan, within the mandate given to the Committee by the Contracting Parties;
- to keep informed about the progress in the implementation of the scientific and technical programmes of the Action Plan in order to ensure a harmonious and mutually reinforcing development of all components of the Action Plan.

#### Annex IV

# TERMS OF REFERENCE OF THE REGIONAL OIL COMBATING CENTRE (REGIONAL ACTIVITY CENTRE FOR POLLUTION EMERGENCY RESPONSE)

The functions of the Centre are:

- to be the central reference point for collection and dissemination of information relevant to marine pollution emergencies involving all type of hazardous materials;
- to develop, in co-operation with relevant national authorities, site-specific, national, sub-regional and regional contingency plans for response to marine pollution emergencies caused by maritime or land-based sources;
- to organize and provide training relevant to the application of contingency plans;
- to organize, contribute or co-ordinate, if requested by the affected Parties, the response to marine pollution emergencies.

The functions of the Centre are discharged under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan and in close co-operation with the International Maritime Organization (IMO) and with the International Register of Potentially Toxic Chemicals (IRPTC) of UNEP.

#### Annex V

### TERMS OF REFERENCE OF THE REGIONAL ACTIVITY CENTRE FOR THE PRIORITY ACTIONS PROGRAMME

The functions of the Centre are:

- to be the central reference point for collection and dissemination of information relevant to the ten priority areas assigned as the overall mandate of the Centre;
- to assist the Contracting Parties, in close co-operation with the relevant national authorities and international organizations, in the implementation of the workplan for the Priority Actions Programme defined by the Contracting Parties;
- to concentrate, without neglecting the broad spectrum and regional character of the ten priority areas assigned as the overall mandate of the Centre, on integrated planning and coastal zone management and on environmental impact and damage assessment in areas covered by the coastal zone pilot projects;
- to organize and provide training relevant to the subject areas covered by the mandate of the Centre;
- to guide, supervise or liaise with, as appropriate, the Regional Project Centres established for specific projects falling within the overall mandate of the Centre.

The functions of the Centre are discharged under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan and in close co-operation with the relevant international, regional and national organizations.

#### Annex VI

# TERMS OF REFERENCE OF REGIONAL ACTIVITY CENTRE FOR SPECIALLY PROTECTED AREAS

The functions of the Centre are:

- to be the central reference point for collection and dissemination of information relevant to the implementation of the Protocol concerning Mediterranean Specially Protected areas;
- to assist the Contracting Parties in identification, selection, establishment, management of marine and coastal protected areas, according to the guidelines adopted by the Contracting Parties;
- to guide and supervise the work of Regional Project Centres established for specific projects (e.g. protection of monk seals and marine turtles) falling within the overall mandate of the Centre;
- to organize and provide training relevant to the identification, selection, establishment and management of marine and coastal protected areas;

The main goal of the Centre is to assist the Contracting Parties to reach the target of 50 new areas by the year 1995.

The fuctions of the Centre are discharged under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan and in close co-operation with the International Union for Nature and Nature Conservation (IUCN).

#### Annex VII

PRINCIPLES FOR ESTABLISHMENT AND OPERATION OF REGIONAL ACTIVITY CENTRES

AND REGIONAL PROJECT CENTRES

ESTABLISHED IN THE FRAMEWORK OF THE MEDITERRANEAN ACTION PLAN

Regional Activity Centres and Regional Project Centres are national institutions entrusted by the Contractig Parties with special regional responsibilities.

The work of the Regional Activity Centres related to the Action Plan is carried out under the overall guidance and supervision of the Co-ordinating Unit for the Mediterranean Action Plan. The Centres report to the Unit and through the Unit to the subsidiary bodies established by the Parties.

The work of the Regional Project Centres related to the Action Plan is carried out under the overall guidance and supervision of the Co-ordinating Unit or (most often) the Regional Activity Centres. The Regional Project Centres report to the Unit or to the Regional Activity Centres, as appropriate, and through them to the subsidiary bodies established by the Parties.

The staff of both types of Centres, as well as their experts and consultants, are appointed and administered by the relevant national authorities. Experts recruited internationally by UNEP or other international or intergovernmental organizations may be outposted to the Centres.

Financial support to the Centres for the work carried out in relation to the Action Plan is derived from the:

- Trust Fund, based on the budget approved by the Contracting Parties;
- contributions in cash, kind and services provided by the host Government or the Centre; and
- other sources procured by the Centre.

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The financial support from the Trust Fund is provided to the Regional Activity Centres on a project funding basis through project documents signed between them and UNEP on behalf of the Contracting Parties.

Financial support from the Trust Fund is provided to the Regional Project Centres on a project funding basis either through project documents signed between them and UNEP or (more often) through contracts between them and the Co-ordinating Unit or the Regional Activity Centres.

The salary of the Director of both types of Centres may be partially covered by the Trust Fund; 10 per cent of the annual expenditure of the Centre derived from the Trust Fund, with US \$ 20,000 being the annual limit.