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PROGRESS REPORT ON THE IMPLEMENTATION OF MED POL IN 1991 AND REVIEW OF 1992 ON-GOING AND PLANNED ACTIVITIES

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Annex : Status of MED POL Monitoring Agreements

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PROGRESS REPORT ON THE IMPLEMENTATION OF THE MED POL IN 1991 AND REVIEW OF 1992 ON-GOING AND PLANNED ACTIVITIES

INTRODUCTION

- 1. The Seventh Meeting of the Contracting Parties to the Barcelona Convention held in Cairo from 8 to 11 October 1991 decided that during 1992 the annual meetings of the Focal Points for MED POL, PAP, BLUE PLAN, REMPEC and SPA would be held separately while a Joint Meeting of the Scientific and Technical Committee and the Socio-Economic would be convened in 1993.
- 2. The present meeting is therefore being organized to specifically deal with the MED POL programme and in particular to review the activities implemented during 1991 and to discuss those planned for 1992/1993.
- 3. The present document was prepared by the secretariat, in close collaboration with the MED POL Co-operating Agencies (FAO, UNESCO, WHO, WMO, IAEA and IOC) for the present Meeting and it contains information on the implementation of the MED POL activities during the period January 1991 March 1992.
- 4. The Committee is invited to review the contents of the document, to evaluate the results achieved and to review and advise the secretariat on activities relative to the implementation of MED POL during 1992.

I. MONITORING ACTIVITIES

- 5. By the end of 1991, the Co-ordinating Unit had finalized the 1991 National Monitoring Agreements with nine Mediterranean Countries. Accordingly, financial contribution for the purchase of equipment and material was distributed as follows: Albania: US\$ 35,000, Cyprus: US\$ 30,000, Egypt: US\$ 60,000, Israel: US\$ 55,000, Lebanon: US\$ 25,000, Malta: US\$ 25,000, Syria: US\$ 32,500, Tunisia: US\$ 40,000 and Yugoslavia: US\$ 60,000. However, these figures represent only committed funds which may slightly change when all invoices are actually paid (see annex).
- 6. By the end of 1991 pollution data relative to the monitoring activities carried out between 1989 and 1991 were sent to the Co-ordinating Unit by Algeria, Cyprus, Egypt, Greece, Israel, Italy, Malta, Morocco, Spain, Tunisia and Yugoslavia (see annex).
- 7. While Cyprus, Israel and Yugoslavia continued their work on the monitoring of airborne pollution by including the relevant activities also in their 1991 National Monitoring Programme, Egypt included for the first time this type of monitoring in his 1991 work programme. Negotiations are being carried out to involve additional countries in this type of monitoring as from 1992.
- 8. The FAO/UNEP/IOC Workshop on the biological effects of pollutants on marine organisms took place at the Euro-Mediterranean Centre on Marine Contamination Hazards (Council of Europe) in Malta from 10-14 September 1991 (FIR/MEDPOL/MAL/23). It coincided with the Second intensive training course on the applications of ecotoxicology in the monitoring, regulations and control of marine pollution in the Mediterranean which was attended by 50 participants.
- 9. The workshop recommended inter alia:

- the establishment of a working group which will formulate a pilot biomonitoring exercise for implementation by selected Mediterranean institutions (to be implemented in cooperation with the Euro-Mediterranean Centre on Marine Contamination Hazards (Council of Europe);
- the organisation of a training workshop to train Mediterranean scientists in a number of biological monitoring techniques (to be held in Nice in September 1992);
- (c) the cooperation between laboratories especially between those in developed and developing countries. Ways should be sought to extend this cooperation to the Black Sea countries.
- 10. The second workshop on airborne pollution of the Mediterranean Sea was held in Monaco from 8 to 12 April 1991 and was attended by 24 participants from 11 Mediterranean countries who submitted the results of their national monitoring and research activities including modelling. The workshop recommended that monitoring of atmospheric input of nutrients be added to the monitoring programme as a priority parameter. The report of the workshop will be published as a volume of the MAP Technical Reports Series.

II. PILOT MONITORING SURVEYS

- 11. The IAEA/FAO/UNEP Workshop on the assessment of pollution by herbicides and fungicides, which took place in Monaco from 30 October to 1 November 1990, recommended that because of their differing physico-chemical and toxicological properties, herbicides and fungicides should be studied separately and that recommendations to the Contracting Parties concerning possible control measures should be made on specific compounds and not groups of herbicides or fungicides. Also, as the existing information on levels in the Mediterranean region is limited, it was agreed to initiate a pilot survey in selected areas to establish levels of certain potential contaminants in the marine environment. The survey should primarily be conducted in the mouths (estuaries) of major rivers in the region e.g. Nile, Po, Rhône, Ebro, etc. The pilot survey on the herbicides was initiated in 1991 after identifying laboratories capable of performing such analyses. IFREMER in Nantes undertook to cover the Rhône river, IRSA in Milano the Po river, the Centre for Research and Development in Barcelona the Ebro delta, and the University of Ioannina the rivers in Northern Greece. The University of Alexandria in cooperation with the Barcelona Institute partly covered the Nile delta. The results of the survey will soon be published in a report.
- 12. Preparations for the pilot survey on monitoring non-biodegradable detergents were completed. The survey which will be implemented by institutions from Greece, Italy, Malta, Spain and Yugoslavia will cover the period April-December 1992. All details, including site selection, matrices, sampling and analytical methods, were agreed on and finalized at a meeting of Principal Investigators from participating institutions, which was jointly convened by WHO and UNEP in Athens from 27 to 29 February 1992.
- 13. Preparations for the WHO/UNEP Consultation meeting on Identification of pathogenic microorganisms in the Mediterranean were started. The meeting is scheduled to be held in Padua, Italy, in October 1992.
- 14. As to the pilot survey on the substances listed in item 1, Annex II of the LBS protocol, the Contracting Parties decided that the survey should be carried out only if unused MED POL funds could be made available.

III. DATA QUALITY ASSURANCE, INTERCALIBRATION AND MAINTENANCE

- 15. The efforts to improve data quality for the MED POL programme continued to be co-ordinated by the Marine Environmental Studies Laboratory of IAEA-MESL in 1991. The work focussed on the continued development of an integrated approach towards quality assurance (QA) which included training, intercalibration, joint monitoring exercises, the preparation of Reference Method manuals, the distribution of standards and reference materials and the provision of support for instrument installation and service. Additionally, taking advantage of the strong links forged with the World Bank's METAP programme, it was possible to provide new instruments and supplies to certain laboratories unable to participate fully in MED POL because of a lack of adequate equipment.
- 16. The training component of the QA programme in 1991 involved 5 areas: trace metals, chlorinated hydrocarbons, polycyclic aromatic hydrocarbons (oil pollutant), organophosphorus pesticides, and user service training on Atomic Absorption Spectrophotometer. A total of 18 trainees were received from 7 Mediterranean countries. As regards intercalibration, a total of 23 laboratories participated in exercises of trace metals and 12 for organic contaminants. There was a marked improvement in data quality for organic contaminants though it is still disappointing to note that only 8 Mediterranean countries participated in the latest exercise. Efforts are being made to urge the remaining countries to participate more actively in the programme and the continued support through the METAP programme will be conditioned to such participation.
- 17. Reference materials and standards are available free of charge to all MED POL laboratories through MESL. The MESL standards bank now includes over 600 analytes. During 1991, new Reference Methods were edited for petroleum hydrocarbons in sediments and for general water chemistry parameters (oxygen, pH, nutrients, etc.). Work is now continuing on the development of new methodologies for organophosphorus pesticides, herbicides and fungicides. This will facilitate the widest possible participation in the upcoming pilot studies for the parameters.
- 18. As on previous occasions, it is important to stress that the MED POL monitoring data cannot be properly applied without systematic data quality control. This message, repeated in every possible occasion, still does not seem to be appreciated in some sectors. The support programme operating through MESL has adequate capacity to meet the needs of all MED POL laboratories and is willing to assist any laboratory which has technical difficulties with full participation in MED POL. Hopefully, the gradual trend towards better quality data from a widening group of laboratories can be accelerated further in 1992.
- 19. The MED POL instrument service and maintenance programme has now been in operation since 1976. Remarkably 6 of the MED POL Phase-I AAS instruments and 5 Gas Chromatographs are still in service. Their gradual replacement has been accelerated in 1991 with the provision of additional funds through the MED POL and METAP programmes. Thus a major obstacle to participation in MED POL is being removed. In order to assist laboratories to conduct preventative maintenance and make optional use of the new state-of-the-art instruments, a programme of user service training was introduced under the supervision of the MED POL service engineer in MESL, Monaco. The first such course involved 5 trainees from four Mediterranean countries. In addition, the UNEP engineer visited 8 laboratories in 6 countries in the course of his normal duties. It is hoped to gradually re-equip the entire MED POL network in the next biennium and new stocks of spare parts are currently being purchased for the new instruments. Additionally, upgraded detectors are being tested in order that the instruments may be adapted to the new parameters subject to pilot monitory studies.

IV. DATA PROCESSING

20. During 1991 the process of computerization of monitoring agreements, heavy metal and halogenated hydrocarbon data in biota and microbial pollution was completed.

- 21. MED POL Phase I data on heavy metals and halogenated hydrocarbons were also transferred into the present database and, as a result, the current inventories of these data span over 15 years. Scientific analysis of heavy metal and halogenated hydrocarbon data in biota started with the help of a consultant who worked in cooperation with the MED Unit and the Co-operating Agencies; similar process has also been initiated for the micro-organism data in sea water.
- 22. The facilities for the analysis and presentation of raw and analyzed data have been upgraded with the purchase of ATLAS*GIS desktop mapping package and also SYSTAT and STATGRAPHICS statistical packages.
- 23. The computerization of the data on effluents, nutrients, petroleum hydrocarbons and airborne pollution is being carried out and will be completed in 1992.
- 24. A data processing meeting on the computerization of marine pollution data, its analysis and presentation tools/techniques is planned for the end of 1992; exchange of views/experiences is expected to guide the future work in the region in this field.
- 25. A bibliographic database on aquatic pollution by organophosphorus compounds was compiled through surveying the world scientific literature and was published as MAP Technical Report Series no. 44.
- 26. A bibliographic database on Marine litter was compiled through surveying the world scientific literature and was published as MAP Technical Report Series no. 50.
- 27. The Directory of Mediterranean Marine Environmental Institutes has been completed and it is now in the printing stage.

V. IMPLEMENTATION OF THE LAND-BASED SOURCES PROTOCOL (LBS) ACTIVITIES

- 28. Responses to the questionnaires regarding the survey on pollutants from land-based sources continued to be minimal. Up to the time of reporting (31 March 1992), completed questionnaires have been received from France, Monaco, Spain (in part) and Greece (in part). Assistance in the form of expert advice was provided to Morocco, Tunisia and Yugoslavia in 1991 and arrangements commenced for provision of similar assistance in 1992 to Egypt, Libya and Syria; the expert visit to Algeria, originally scheduled for 1991, had to be postponed. The document UNEP(OCA)/MED WG.35/Inf.5 gives an outline of the progress achieved in the preparation of the survey.
- 29. The final draft version of the guidelines for treatment of effluents prior to discharge into the Mediterranean Sea (in terms of Article 7.1.(6) of the Protocol) was completed in late 1991. The substantive version will be finalized follow a small <u>ad hoc</u> expert review meeting in April 1992.
- 30. The document on assessment of the state of pollution of the Mediterranean by carcinogenic, teratogenic and mutagenic substances was completed, and is submitted to the Working Group as document UNEP(OCA)/MED WG. 35/Inf.3. The assessment should be treated as an interim document, which will be updated to the extent possible during the next 12 months to allow concrete proposals to be submitted to the Joint Committees meeting, and the Contracting Parties, in 1993. This subject is treated separately under Agenda item 6.
- 31. Work was commenced in the updating of the assessment of the state of pollution of the Mediterranean Sea by pathogenic micro-organisms, which was approved by Contracting Parties at their Seventh Ordinary Meeting in October 1991, in accordance with the measures adopted.

- 32. A consultation meeting on health risks from bathing in marine waters was jointly convened by WHO and UNEP in Athens from 15 to 18 May 1991, and attended by 14 participants (EUR/ICP/CEH 103). The meeting reviewed all previous studies carried out worldwide on correlation between bathing water quality and health effects and, on the basis of such review, modified the guidelines for future studies.
- 33. A consultation meeting on health risks from contaminants in Mediterranean Seafood was jointly convened by WHO and UNEP in Athens from 10 to 14 December 1991 (EUR/ICP/CEH 110). It was attended by 12 participants and concentrated on 2 main topics: viruses and algal biotoxins. Detailed recommendations for action were made for both topics, and these are being followed up.
- 34. The text of the Annex IV to the LBS Protocol which defines the conditions of application of this Protocol to pollution from land-based sources transported by the atmosphere, was adopted by the Seventh Ordinary Meeting of the Contracting Parties to the Barcelona Convention in October 1991. The meeting also adopted the workplan for the implementation of Annex IV according to which two activities were planned for 1992: a) the establishment of an expert group on airborne pollution and b) the compilation of an emission inventory of heavy metals and acidifying compounds. The compilation should be done in accordance with the common guidelines. The first draft of the guidelines was prepared in 1991 and will be sent to the National Co-ordinators for reviewing.
- 35. The Assessment of the State of Pollution of the Mediterranean Sea by Persistent Synthetic Materials which may float, sink or remain in suspension was finalized in co-operation with UNEP and FAO and approved by the Seventh Contracting Parties Meeting in Cairo, 8-11 October 1991.
- 36. The work on the preparation of the assessment document on the problem of eutrophication and plankton blooms in the Mediterranean continued. The first draft of the document, which will also include proposed control measures, is expected by mid 1992.
- 37. The sixteenth session of the Governing council of the United Nations Environment Programme (1991), in decision 16/26 A on "Marine pollution from land-based sources", requested the Executive Director to continue the preparation of elements for draft strategy option and actions to reduce the degradation of the marine environment from land-based activities. The decision also called on the Executive Director to convene a meeting of government-designated experts to formulate a draft strategy, including a targeted and costed programme of action for reduction of the degradation of the marine environment from land-based sources of pollution and activities in coastal areas, and to complete a targeted and costed action programme for the Mediterranean as an input to the strategy, and as an example for the preparation of an international study. An informal consultation of technical and legal experts (Nairobi, 30 September-3 October 1991) recommended the preparation of specific detailed case studies on the costs and benefits from the reduction of the degradation of the marine environment, as a supplement to the preliminary estimate of the costs associated with the protection of the Mediterranean Sea.
- 38. In consultation between OCA/PAC, the Co-ordinating Unit for the Mediterranean Action Plan (MEDU) and the relevant national authorities, and taking into account the on-going integrated coastal zone management pilot projects carried out in the framework of the Mediterranean Action Plan, the Bay of Izmir and the Island of Rhodes were selected by the secretariat as the sites of the case studies. Two reports were prepared and presented at the Meeting of Government-designated experts to formulate a draft strategy for the reduction of the degradation of the marine environment from land-based sources of pollution and activities in coastal areas, Nairobi, 9-13 December 1991, as follows:
 - Preliminary study on the costs and benefits of measures for the reduction of the degradation of the environment from land-based sources of pollution and activities in coastal areas of the bay of Izmir (UNEP(OCA)/WG.14/Inf.8).

- Preliminary study on the costs and benefits of measures for the reduction of the degradation of the environment from land-based sources of pollution and activities in coastal areas of the island of Rhodes (UNEP(OCA)/WG.14/Inf.9).
- 39. Both case studies were well received and their completion was strongly recommended as well as the development of common methodology for the preparation of such studies, which could be applied for regional and local studies. Both completed studies and the draft common methodology were discussed at the Consultation Meeting on costs and benefits of reduction of the degradation of the marine environment from land-based sources of pollution held in Athens, 6-8 April 1992 (UNEP(OCA)/MED WG. 45/6).

VI. RESEARCH ACTIVITIES

- 40. As part of the research component of MED POL, between September 1991 and March 1992 a total of 49 research proposals were submitted to the secretariat for implementation in 1992. Negotiations with the relevant principal investigators are under way. Detailed information on each research projects can be made available to National Co-ordinators, as requested.
- 41. During 1991, a total of 109 projects were on-going and 26 were completed with a total expenditure of US\$ 209,000 While a number of on-going projects continued to be implemented during 1992 under the activities A to L, the new projects were all grouped under the new research areas I to V.
- 42. In persuance to the decisions of the Seventh Meeting of the Contracting Parties to the Barcelona Convention, held in Cairo from 8 to 11 October 1991, half of the research funds for 1992 were reserved for projects related to one single subject: "Eutrophication and Plankton Blooms". In order to prepare a proper workplan of the activities, an informal consultation was held in Athens from 19 to 20 March 1992. The group, (composed of four experts plus the Med Unit staff and representatives of the Co-operating Agencies), agreed that the more efficient approach to obtain the best results from such a multi-laboratory programme was to implement a small number of case studies in 1992 using the same uniformed objectives and methodology which would ensure comparable results (see document UNEP(OCA)/MED WG. 44/1).
- 43. During 1991 the five research areas (I to V) were implemented as follows:

Research area I: Characterization and measurements

(including projects under Activity A)

Projects completed in 1991: 4
Projects on-going on 31 December 1991: 20
Total 1991 contribution: US\$ 40,000

Research area II: Transport and dispersion

(including projects under Activity F and L)

Projects completed in 1991: 6
Projects on-going on 31 December 1991: 20
Total 1991 contribution: US\$ 32,500

Research area III: Effects

(including projects under Activity D, I, J, G and H)

Projects completed in 1991: 15
Projects on-going on 31 December 1991: 49
Total 1991 contribution: US\$ 99,500

Research area IV: Fates/Environmental transformation

(including projects under Activity K)

Projects completed in 1991: 1
Projects on-going on 31 December 1991: 18
Total 1991 contribution: US\$ 37,000

Research area V: Prevention and Control

(including projects under Activity E and B)

Projects completed in 1991:

Projects on-going on 31 December 1991:

2 Total 1991 contribution:

US\$

VII. TRAINING AND FELLOWSHIPS

- 44. As in the past, during 1991 assistance was provided to MED POL participants in the form of individual group training, visit of scientists to more experienced laboratories, support for participation at MED POL meetings (workshops, intercalibration exercises and quality assurance meetings) and travel grants for attendance at meetings related to the MED POL programme. Details can be made available to National Co-ordinators, as requested.
- 45. A total of 74 scientists from 15 countries benefitted from this support programme for a total expenditure of US\$ 99,118.
- 46. The FAO/IOC/UNEP Training Workshop on the Statistical Treatment and Interpretation of Marine Community Data took place at the Arab Maritime Transport Academy, Alexandria (Egypt), from 9-19 December 1991. It was the fourth workshop of this type and this time preference was given to participants from the South (FIR/MEDPOL/ALE/4).
- 47. The fourth WHO/UNEP training course and intercalibration exercise on microbiological methods for marine pollution monitoring was held from 21 to 26 October 1991, in French, at the Institut national d'hygiène, Rabat, Morocco. It was attended by 18 participants from 7 Mediterranean Countries. Instruction was provided on determination of both bacterial indicator organisms and pathogens in seawater and shellfish (EUR/ICP/CEH 105).
- 48. Preparations were commenced regarding the fifth training course and intercalibration exercise, which will be held in English at the Athens School of Hygiene, Athens, Greece, tentatively from 2 to 7 November 1992.

VIII. DOCUMENTATION

49. All reports of meetings held in the period January 1991 - March 1992 are listed in document UNEP(OCA)/MED WG. 35/Inf.1 as well as the published issues of the MAP Technical Report Series relevant to MED POL. In addition, during the above mentioned period, as mentioned under "MED POL Data Processing", the directory of Mediterranean Environmental Institutes was finalized and it is presently being printed.

IX. CLIMATIC CHANGES

50. A comprehensive report on the activities concerning implications of climatic change in the Mediterranean region was presented to the last Joint Meeting of the Scientific and Technical Committee and the Socio-Economic Committee (document UNEP(OCA)/MED WG. 25/Inf.9). Since the last Joint Committees' meeting the work on five case studies (Island of Rhodes, Kastela Bay, Malta, Syrian coast, Cres/Losinj islands) has been progressing well. The study on Island of Rhodes will be completed by June 1992 and the work on the other four studies will be completed by the end of 1992. The reports of the Task Team meetings on the above case studies appear as reference documents to this meeting. The results of the Mediterranean first generation case studies and development of the Second generation case studies were presented at the IPCC Workshop "The Rising Challenge of the Sea", Porlamar, Margarita island, Venezuela, 9-13 March 1992.

X. INSTITUTIONAL ARRANGEMENTS

- 51. As in the past, the monitoring activities of MED POL were coordinated by the MAP Coordinating Unit through contacts with the MED POL National Co-ordinators and with the full participation of the relevant Co-operating Agencies (FAO, UNESCO, WHO, WMO, IAEA, IOC).
- 52. As to the co-ordination of the research activities of MED POL as in the past, the relevant Co-operating Agencies were directly responsible for the technical implementation of the various research projects through direct contacts with the national research centres.
- 53. The active participation of the Co-operating Agencies remained an important factor contributing very significantly to the implementation of MED POL. In addition to the regular and frequent contacts between UNEP and the Co-operating Agencies, the following meeting of the Inter-Agency Advisory Committee (IAAC) for MED POL took place in order to ensure the harmonious co-operation and implementation of the MED POL activities during 1992 and 1993:
- XXV Meeting of IAAC (Athens, 2-5 December 1991); it reviewed the 1992-1993 programme as adopted by the Contracting Parties and prepared a workplan of activities. Discussions were also held on the preparation of the new MED POL programme to be proposed to the 1993 National Coordinators' meeting (UNEP(OCA)/MED WG. 34/1).

ANNEX

STATUS OF MED POL MONITORING AGREEMENTS AND DATA REPORTS

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

Abbreviations/Key:

A = Airborne

MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other

X = Programme proposed/Data received
= Limited data received

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

Abbreviations/Key:

A = Airborne

MC = Micro-organisms, HH = Halogenated Hydrocarbons, HM = Heavy Metals, O = Other

Programme proposed/Data received

^{# =} Limited data received

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

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X = Programme proposed/Data received
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1	1983	-	-	-	-	Х	-	Х	Х	-	-	~	-	•	X	•	Х	-	-
	1984	-	•	-	•	Х	-	Х	Х	-	•	- '	•	-	X	•	Х	~	-
	1985	-	-	-	-	Х	-	х	-	•	*	•	-	•	х		Х	Χ	
	1986	-	-	-	-	Х	-	Х	-	-	*		-	- `	х	-	Х	*	^-
	1987	-	-	-	-	х	-	х	-	-	•		-	-,	X	-	X	~	-
	1988	-	-	-	-	х	-	х		-	. •	-	•	-	x	•	Х	~ ^	~
	1989	-	-	-	-	х	-	Х	-	Х	-		-	~	х	-	X	~	-
	1990	-	-	-	-	х	_	Х	-	Х	-	-	•	~	X	-	Х	~	- 1
	1991	-	-	-	-	х	-	х	-	Х	-	-	-	-	-	-	Х	-	-
																	<u> </u>		

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

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X = Programme proposed/Data received

^{# -} Limited data received

			P	ROGE	RAMN	ME C	OVE	RAGI					DA.	TA S	UBM	1\$81	ON		
			SOU	RCES		COA	STAL/F	REFERE	NCE			sou	RCES		COA	STAL/I	REFERE	NCE	
COUNTRY	YEAR	МС	H	НМ	0	МС	НН	НМ	0	Α	МĊ	НН	НМ	Q	МС	НН	НМ	0	Α
ITALY	1987						ï				-	-	7	•	x	X	X	X	~
	1988										-	•	,	-	X	Х	Х	X	-
	1989										÷	-	•	~	x	X	X	X	
	1990										, <u>-</u>	-	-	-	X	-	X	Х	•
												,	,					·	
LEBANON	1983	-	-	-	-	Х	Х	Х	Х	-		/ 44	~	- ′	-	~	-, '	S.	-
	1984										-	•′	7	57	X	X	Х	~	-
	1985	-	-	-	-	Х	Х	Х	Х	-	• ,	\$`	•		- X	#	Х	-	-
	1986	-	-	-	-	Х	Х	Х	х	-	-	#	-		X	#	#	-	`~`
	1987	-	-	-	-	X	Х	Х	Х	-	-	•	•	-	X	#	#	~	7.
	1988	-	-	-	-	Х	Х	Х	Х	-	-	٠.	3	٠	X	Χ.	x.	-	
	1989	-	-	-	-	Х	Х	Х	Х	-	-	•	•	-	-	-	-	٠	*
	1990				Ì									,	,	,			ì
	1991		-	-	-	Х	X	Х	Х	-	-		-	-	· -	-	-	-	-
					<u> </u>	<u> </u>								<u> </u>		, ,			

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= Limited data received

			Р	ROGI	A M A	ΛE C	OVE	RAGI					DA.	TA S	ивм	1881	O N		
			sou	RCES		COA	STAL/F	REFERE	NCE			śou	RCES		ÇOA	STAL/F	REFERE	NCE	
COUNTRY	YEAR	мс	НН	НМ	0	МС	НН	НМ	0	Α	МС	НН	НМ	0	MC	НН¸	НМ	O	Α
LIBYA	1986	х	-	Х	Х	Х	-	Х	х	-	-	+	-	•	-	-	-	~	-
	1987											~	/ - -	` •	*	•	#	#	٠
	1988																		
	1989										-	-	~	٠,	-	-	#	Х	-
													,				,		
MALTA	1982										-	-	• ,	-	#	-	-		-
	1983	<u> </u>									+	#	#	` -	X	~ `	,**	4	-
	1984	Х	Х	Х	Х	х	Х	Х	Х	-	-	#	#	#	X	Х	X	#	•.
	1985	X	Х	X	X	Х	x	X	X	-	#	#`	#	#	X	X	X	#	-
	1986	-	Х	Х	Х	х	Х	Х	Х	-	#	# .	#	#	Х	X	X	#	
	1987	-	Х	X	Х	х	х	х	Х	-	-	#	#	#	X	X	X	# .	-
	1988	-	Х	Х	х	х	х	х	Х	-		#	#	#	x	X	Х	#	· -
1	1989	-	Х	Х	х	Х	х	х	х	-	-	#	#	#	x	X	Х	#	-
	1990	х	х	х	х	х	х	Х	Х	-	-	#	#	#	×	X	X	#	
							_									ļ			

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

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⁼ Limited data received

			P	ROGI	RAMI	ME C	OVE	RAGE					DA.	TA S	ÙВМ	ISSI	ON		
			sou	RCES		COA	STAL/F	REFERE	NCE			sou	RCES		COA	STAL/	REFERE	NCE	
COUNTRY	YEAR	МС	НН	НМ	0	МС	. нн	НМ	0	Α	МС	НН	НМ	0	MG	НН	НМ	0	Α
MALTA	1991	х	Х	х	Х	х	х	Х	Х	-	. -	-	-	•	•	*	-	-	*
													,				,		
MOROCCO	1983									:	-	#	#	#	х	#	#	Х	-
	1984	х	х	х	Х	Х	Х	Х	Х	-		#	#	#	#	#	Χ.	-	
	1985										-	X.	X	х	x	Х	Х	۴.	-
	1986	x	Х	х	Х	Х	Х	Х	Х	-	-	X	X	х	x	١٩٠	Х	Х	-
	1987	х	х	x	Х	х	х	Х	Х	-		X	Х	×	X	Х	Х	Х	٠.,
	1988	х	х	х	х	Х	х	х	Х	-	2	X	Х	X	X `	X	Х	·X	-
	1989										-	Х	X	х	х	-	4	Х	#
	1990										-	-	.	x	X	_ :		х	X
	1991										-	-	4	-		-	·-	\~	#
SPAIN	1981										-	-		-	. x	×	х	х	
	1982										-	-	-	-	х	х	×	х	٠,
																[

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Limited data received

			ΡĮ	3 O G F	AMA	AE C	OVE	RAGI					DA.	TA S	UBM	ISSI			
			SOUI	RCES		COA	STAL/F	REFERE	NCE			sou	RCES		COA	STAL/F	REFERE	NCE	
COUNTRY	YEAR	мс	НН	НМ	0	МС	НН	НМ	0	Α	MC	HH	НМ	٥	MG	НН	НМ	0	A
SPAIN	1983										×	X	X	X	X	×	Х	X.	-
	1984										x	Х	Х	X	/ -	x	X ′	. X	5.
	1985										, <u>-</u>	-	-	, -		X	X	X	1.50
	1986										-	.	, <u> </u>	•	٠	X	X	X	-
	1987											,				,		`	
	1988										X	X	X	X	X	X	X	×	-
	1989										X ,	X	X	X .,		X	X	X	-
	1990										X	` X ,	Х	X	X	X	X,	, X	-
							<u>'</u>					Ì		·				· ,	
SYRIA	1986	X	-	X	X	Х	-	Х	X	-	-	*	- '	-	#	#	#	. X .	
	1987	Х	-	Х	Х	Х	-	Х	Х	-	-	•	- ,		-	~	/ -	`-	-
	1988	Х	-	Х	Х	х	-	Х	X	-	-	-	-	, -	X	-	#	`~	-
	1989	-	-	-	-	×	x	х	х	-	-	-	-	-	#	-	X	~	-
	1990	-	-	-	-	x	х	х	×	-	-	-	-	-`	х	-	#	~	-

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X Programme proposed/Data received
Limited data received

			P	ROGI	RAMN	ME C	OVE	RAGI					D A	TA S	UBM	1881	ON		
			SOU	RCES		COA	STAL/F	REFERE	NCE			SOU	RCES	Ì	COA	STAL/	REFERE	NCE	
COUNTRY	YEAR	МС	НН	НМ	0	МС	НН	НМ	0	Α	MG	НН	НМ	0	МС	НН	НМ	0	A
SYRIA	1991	-	-					х	х		-	-	-	-		-	-	~	-
	:										^				k .				
TUNISIA	1981					:						-	-	. '	-	#	#	#	-
	1982										· - '	-	•	<i>></i>		#	#	*	-
	1983	ŀ									-	-	-	-	-	#	#	*	-
	1984										-	,	-	-		#	#	₩.	-
	1985										•	*	-	•	., -,	*#	#	₹,	-
	1986										-	-	-	• `	-	#	#	~	-
	1987										-	*	•	-	4.77	#	#		-
	1988																	,	
	1989	-	-	Х	Х	Х	Х	Х	Х	-	-	-	~	-	#	-	#	-	-
	1990	Х	х	Х	х	Х	х	Х	Х	-	-	-	-	-	-		#	*	- `
	1991	Х	х	X	х	х	х	Х	Х	-	•	•••	-	-	-	-	-	-	-
														,					,",
			<u> </u>												<u> </u>	<u> </u>			

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			Р	ROGI	RAMI	ME C	OVE	RAGI					DΑ	TA S	UВМ		ON		
			SOU	RCES		COA	STAL/I	REFERE	NCE		,	sou	RCES		COA	STAL/	REFERE	NCE	
COUNTRY	YEAR	МС	НН	НМ	0	MC	НН	НМ	0	Α	МС	НН	НМ	0	МС	НН	НМ	a	Α
TURKEY	1983										х	₩	Х	X	×	÷	Х	X,	
	1984										x	7"	X	X	x	X	Х	X	-
	1985										-		-	-	x ´	#	×	X ·	-
	1986										-		-	-	х	-	Х	X	-
									,		,								
YUGOSLAVIA	1983	Х	X	х	X	х	х	х	x	-	x	ΧÌ	X	x	X	X	X	X	`-
	1984	Х	X	Х	X	Х	Х	Х	Х	-	x	X	X	X	x	Х	X	X	-
	1985	Х	X	Х	X	Х	х	Х	х	-	x	X	X	Х	X	X	` X	X	-
	1986	Х	Х	Х	X	Х	Х	Х	X	-	X	X	χ	X	X	X	Х	X.	-
	1987	Х	X	Х	Х	Х	Х	Х	Х	-	Х	X	X	Х	X	X	X	X	٠
	1988	Х	Х	Х	Х	Х	х	Х	Х	-	Χ,	Χ,	X	X	Х	X	X	X	-
	1989	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	X	X	X	х	X	Х	X	-
	1990	х	X	х	х	Х	х	х	Х	х	x	X	X	X	. x	X	Х	Х	
	1991	X	Х	Х	Х	Х	х	х	Х	х									
												v							

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