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## MEDITERRANEAN ACTION PLAN

Consultation on Evaluation of Results of  
Survey of Pollutants from Land-based  
Sources in the Mediterranean (MED X BIS)

Athens, 5-6 December 1995

## REPORT ON CONSULTATION ON EVALUATION OF RESULTS OF SURVEY OF POLLUTANTS FROM LAND-BASED SOURCES IN THE MEDITERRANEAN (MED X BIS)

In cooperation with



WHO

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UNEP  
Athens, 1995

**WHO/UNEP CONSULTATION ON EVALUATION OF  
RESULTS OF SURVEY OF POLLUTANTS FROM  
LAND-BASED SOURCES IN THE MEDITERRANEAN  
(MED X BIS)**

**DRAFT REPORT**

- 1 The meeting was held at the premises of the Coordinating Unit for the Mediterranean Action Plan, Athens, Greece from 5 to 6 December 1995, and attended by four experts from Mediterranean countries, and by one representative each from WHO and UNEP. A list of participants is attached as Annex 2.
2. The objective of the meeting was to consider the replies received from Mediterranean countries in response to the LBS survey questionnaires, and to decide on the exact format of the evaluation report, including points of comparison with the 1976-77 survey.
- 3, Dr G Kamizoulis, Senior Scientist, Mediterranean Action Plan, WHO Regional Office for Europe, welcomed participants on behalf of Dr J.E Asvall, Regional Director, and explained the scope and purpose of the meeting Dr L Jetic, Deputy Coordinator, Mediterranean Action Plan, welcomed participants on behalf of Ms Elizabeth Dowdeswell, Executive Director of UNEP, and also on behalf of Mr Lucien Chabason, Coordinator of the Mediterranean Action Plan.
- 4 Professor S. Tedeschi was elected Chairman, Mr. L. Loizides Vice-chairman and Dr L.J. Saliba Rapporteur. Dr G. Kamizoulis acted as Technical Secretary.
5. The meeting reviewed the responses to the questionnaires Completed questionnaire forms had been received from ten countries - Albania, Croatia, Cyprus, France, Greece, Monaco, Slovenia, Spain, Syria and Turkey Most of the replies received related to the first questionnaire, dealing with liquid municipal wastes. Very few replies were received with regard to the second questionnaire, dealing with industrial waste discharges, and the third questionnaire, all three parts of which last dealt with petroleum hydrocarbon discharges However, in many of the completed questionnaires, various data were omitted, - i.e. the questionnaires were only partially completed. A list of data submitted is given in Annex 1
- 6 In the comprehensive report received from Turkey, the actual completed questionnaire forms were only received for large areas globally. A brief qualitative report was also received from Egypt as well as questionnaires on industrial waste discharges. Questionnaires received from Algeria contained only data on oil discharges from refineries and on industrial discharges of petroleum hydrocarbons. The fact that no reply was received from Italy left a considerable gap in the Central Mediterranean.
7. The meeting discussed possible correlation between the present survey and the previous one conducted in 1976-77. There were problems in achieving any significant degree of correlation, because:

- (a) Replies to the current questionnaires had been received from only ten countries.
  - (b) The previous survey considered the Mediterranean from the point of view of 10 sub-regional areas, each of which comprised all or part of more than one country.
  - (c) The previous survey was concerned primarily with overall pollution loads for specific substances.
  - (d) The mode of approach of the previous survey was different, and results were mainly reached by indirect estimates.
8. The meeting agreed, nevertheless, that a partial comparison could be made in the case of one sub-region, located in the Eastern part of the Mediterranean, as information was available from the countries comprising these two sub-regions.
9. The meeting agreed that the evaluation report would be in the following format:
  - (a) An introduction and background, including relevant material on the Mediterranean Action Plan and its components, land-based pollution, and the measures taken in terms of the LBS Protocol.
  - (b) A brief resumé on the first (1976-77) survey, including its scope and purpose, mode of implementation and broad results.
  - (c) The history and organization of the current survey.
  - (d) The results of the current survey, comprising.
    - municipal wastewater production and collection;
    - municipal wastewater treatment;
    - municipal wastewater disposal, including sludge disposal;
    - municipal wastewater re-use;
    - industrial wastewater;
    - municipal solid wastes.
  - (e) Analysis of the situation on the basis of the above results, and conclusions.
  - (f) Recommendations for follow-up work
10. The meeting stressed the fact that all efforts should be made to complete the current survey, as the information was extremely useful for the implementation of the LBS protocol.
11. The meeting discussed and agreed on various items of detail regarding presentation of results and points of comparison between the current and previous surveys. In particular the meeting agreed on the estimated annual *per capita* loads of specific parameters in domestic sewage.

12. The meeting recommended that the current survey should be completed as soon as possible, so that a final evaluation comprising all Mediterranean countries could be made. A further survey on exactly the same lines, to enable direct comparison, should be made after an adequate period of time, which would be decided on by the Secretariat, which would also take into consideration, the recommendation of the Washington DC Conference on the preparation of the global plan of Action for the protection of the marine environment from land-based activities. It was agreed that this should be included in the appropriate section of the evaluation report.
  
13. The meeting agreed that the consultants currently engaged in preparing the various sections of the document would complete their work in time for such document to reach the Secretariat by 31 December 1995.

ANNEX 1

**SURVEY ON POLLUTANTS FROM LAND-BASED SOURCES  
IN THE MEDITERRANEAN**

Countries	Questionnaires submitted and related to				
	1	2	3a	3b	3c
ALBANIA	X	X	-	-	-
ALGERIA	-	-	X	X	-
CROATIA	X	-	-	-	-
CYPRUS	X	*	-	X	-
EGYPT	-	X	-	-	-
FRANCE	X	*	-	-	-
GREECE	X	-	-	-	-
MONACO	X	-	-	-	-
SLOVENIA	X	-	-	-	-
SPAIN	X	*	-	X	X
SYRIA	X	X	-	X	-
TURKEY	X	X	*	*	-

Questionnaire 1: on liquid domestic discharges

Questionnaire 2. on industrial discharges containing selected substances listed in Annexes I and II to the protocol for protection of the Mediterranean Sea against pollution from land-based sources

Questionnaire 3a. on industrial discharges of petroleum hydrocarbons

Questionnaire 3b: on oil discharges from refineries

Questionnaire 3c: on oil discharges from reception facilities.

\* Data received cover small part of the country.

## ANNEX 2

## LIST OF PARTICIPANTS

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