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Meeting of MED POL National Coordinators

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RECOMMENDATIONS FOR 1997 MED POL-RELATED ACTIVITIES

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INTRODUCTION

This document contains a set of recommendations for MED POL-related activities which are submitted to the MED POL National Coordinators for discussion and agreement with a view to their transmission to the Extraordinary meeting of the Contracting Parties (1-5 July 1996) for adoption.

RECOMMENDATIONS

The National Coordinators agree to submit to the Contracting Parties the following recommendations:

A. MED POL PHASE III

- to approve the MED POL - Phase III Programme for the assessment and control of pollution in the Mediterranean Region (1996 - 2005) as contained in document UNEP(OCA)/MED WG.104/4 and recommend its adoption by the Extraordinary Meeting of the Contracting Parties (Montpellier, 1-5 July 1996);
- to establish an Advisory Group of Experts for MED POL which will advise the Secretariat and the Meeting of MED POL National Coordinators on the scientific and technical aspects of the design, development and implementation of the MED POL programme as well as on the review of its accomplishments. The Group could be assisted for specific subjects by additional experts. The proposed terms of reference for this group are found in Annex I.

B. ASSESSMENT OF POLLUTION-RELATED PROBLEMS

- to formulate and implement a programme of coastal zone trend monitoring on a regional basis;
- to formulate and implement a compliance monitoring programme in their respective countries which should include all the adopted common measures and other relevant decisions of the Contracting Parties;
- to ask the Secretariat to provide assistance to developing Contracting Parties requesting it, in their efforts to redesign and implement their national monitoring programmes;
- to continue the development of a biological effects (marine organisms) monitoring programme and to implement it in parallel with the chemical monitoring programme within the framework of MED POL, as decided at the Eighth Ordinary Meeting of the Contracting Parties in 1993;
- to organize an experts' meeting to review the results of the biological effects pilot monitoring exercise and agree on standard methodology;

- to organize an experts' meeting on airborne pollution;
- to ask the Secretariat to continue implementing the Data Quality Assurance activities including microbial parameters, in order to ensure full reliability of results;
- to establish a MED POL Expert group on airborne pollution and adopt its terms of reference as specified in Annex II; and
- to approve that fifty percent of the 1997 budget earmarked for research is utilized for projects on eutrophication and biological effects.

C. POLLUTION CONTROL

i) Implementation of LBS Protocol

- to urge Contracting Parties to implement the common measures adopted and to inform the Secretariat accordingly;
- to urge Contracting Parties to report on their action to incorporate the decisions on common measures into national legal instruments;
- to ask the Secretariat to provide assistance to Contracting Parties requesting it (including capacity building) for the implementation and enforcement of the control measures adopted by them;
- to request the Secretariat to follow up the implementation by the Contracting Parties of pollution control measures adopted;
- to ask the Secretariat to provide assistance to Contracting Parties requesting it in formulating and implementing national and regional action plans for the control of land-based pollution;
- to urge Contracting Parties who have not completed the questionnaires for the survey of land-based sources of pollution to do so at the latest by September 1996 to enable the Secretariat to prepare a final version of the survey by March 1997;
- to ask the Secretariat to organize a meeting of government-designated experts for the preparation of the Regional Action Plan for the control and elimination of pollution by land-based sources and activities;
- to ask the Secretariat to organize a regional programme for the identification of pollution "hot spots" (sources); and
- to ask the Secretariat to formulate a programme of assistance for Contracting Parties for the establishment/enhancement of national environmental inspectorates and the organization of training of national environmental inspectors.

ii) Implementation of Dumping Protocol

- to urge Contracting Parties to make every effort to send out on a regular basis annual reports on dumping to the MED Unit.

iii) Assessments and control measures

- to adopt the following:

Assessment of the state of pollution of the Mediterranean Sea by zinc, copper and their compounds

Zinc and copper which appear in Annex II of the LBS protocol are found in nature principally in sulphide deposits and in minerals of basaltic rocks. Zinc also occurs as a silicate complex and as the carbonate. Weathering and erosion of the earth's crust release and transport zinc and copper into the marine environment, mainly by surface runoff, rivers and atmospheric deposition. Anthropogenic activities also contribute to the level of inputs into the marine environment. Such activities are: mining, industrial processing of ores and metals and the disposal of metals and their compounds mainly in sewage and sludges. Other activities such as combustion of fossil fuels and waste incineration and smelting release zinc and copper into the atmosphere which are subsequently transported to the sea via various pathways.

If atmospheric inputs as well as inputs through the straits of Gibraltar and the Dardanelles are taken into consideration, the estimated loads into the Mediterranean sea are about 90,000 tons per year for zinc and 24,000 tons per year for copper.

The levels of zinc in seawater can be as high as $450 \mu\text{g L}^{-1}$ especially in polluted harbours. However, in clean offshore areas the values range from 1 to $5 \mu\text{g L}^{-1}$ and can even go down to $0.02 \mu\text{g L}^{-1}$. The reported copper concentrations for the Mediterranean are lower and vary from $0.2 \mu\text{g L}^{-1}$ to $50 \mu\text{g L}^{-1}$ in the vicinity of point sources.

The concentration levels of these metals found in sediments vary with the extraction method used. For total extraction and subsurface samples the background levels for zinc and copper are estimated to be 20 and $15 \mu\text{g g}^{-1}$ DW respectively. In polluted areas, concentrations of up to a few thousand $\mu\text{g g}^{-1}$ have been reported, copper values being lower than the zinc ones.

The concentrations of these metals in marine biota vary with the species. The highest concentrations are found in some molluscs such as oysters where concentrations of Zn may exceed $100 \mu\text{g g}^{-1}$ FW and those of copper $20 \mu\text{g g}^{-1}$ FW. From the MED POL data it has been estimated that the average zinc value for the entire Mediterranean in the mussel Mytilus galloprovincialis is $27 \mu\text{g g}^{-1}$ FW and in the fish Mullus barbatus is about $4 \mu\text{g g}^{-1}$ FW. The respective values for copper are $1.3 \mu\text{g g}^{-1}$ for M. galloprovincialis and $0.4 \mu\text{g g}^{-1}$ for M. barbatus.

Seafood is a major source of zinc and copper for man. Intake of excessive doses of copper by man leads to severe mucosal irritation and corrosion, widespread capillary damage, hepatic and renal damage and irritation of the central nervous system followed by depression. However, in general, the concentrations found in edible species do not pose a threat to human health. The reported lowest lethal dose known for zinc for a human is $500 \mu\text{g kg}^{-1}$ bw/day, and zinc has not been implicated in any, human disease derived from the eating of seafood. Also, copper poisoning of dietary origin is rare in man and higher mammals owing to the powerful emetic action of copper. However, both metals have been found to have adverse effects on marine life at concentrations much lower than those occurring in polluted areas. Copper concentrations in seawater as low as $10 \mu\text{g L}^{-1}$ had a significant inhibitory effect on the shell growth of *M. edulis* and $5 \mu\text{g L}^{-1}$ on the reproduction of the isopod *Idothea baltica*. Zinc values of between 10 and $40 \mu\text{g L}^{-1}$ have shown to have harmful effects on the life of marine organisms.

In order to protect marine organisms, communities and ecosystems, the concentrations of both metals in seawater have to be reduced to levels which are not harmful. For this purpose it is necessary to limit the inputs of copper and zinc in the marine environment both in quantity per unit time discharged and as concentration of the metals in liquid effluents and sludges.

It is recommended that environmental quality objectives are set for the coastal waters of the Mediterranean. In order to achieve these water quality objectives, it is also recommended that limit values are set for all effluent discharges into the Mediterranean Sea.

For the protection of human health, it is recommended that the situation is monitored and that legal limits should be imposed only when and where necessary.

- To adopt the following:

Measures for the control of pollution by zinc, copper and their compounds

The Contracting Parties, bearing in mind article 4 of the Barcelona Convention and article 6 and Annex II of the Land-Based Sources Protocol as well as the principle of precautionary approach adopted by them at their 6th Ordinary Meeting (Athens, 3-6 October 1989) and taking into consideration the conclusions of the UNEP/FAO/WHO document (UNEP(OCA)/MED WG.104/Inf.4) on the assessment of the state of pollution of the Mediterranean sea by zinc, copper and their compounds,

agree to take the following action as from 1 January 1998:

- (a) For the protection of marine organisms, communities and ecosystems

- to set water quality objectives for total dissolved copper and zinc in their coastal waters. These objectives should be $10 \mu\text{g L}^{-1}$ for zinc and $5 \mu\text{g L}^{-1}$ for copper.

In order to achieve the above quality objectives, they agree:

- to set limit values for both copper and zinc in all effluent discharges into the Mediterranean Sea before dilution. These values should be 0.5 mg for copper and 1.0 mg for zinc per litre discharged (monthly flow-weighted average concentration of total copper and zinc);

(b) For the protection of human health

- to monitor the trends of zinc and copper content in marketed species of seafood;
- to identify areas where high levels of copper and zinc in edible species of seafood are reported and might pose a health problem, taking into account their intake from other sources;
- to impose legal limits on the copper and zinc content of seafood in such areas (or any other restrictions considered appropriate under prevailing conditions) should the local situation so demand, including prohibition of aquaculture and fishing activities in such areas;
- to formulate and implement recommended measures to regulate the type and amount of seafood consumed by high-risk groups, if it is considered that such groups are not sufficiently protected by local measures of a general nature;

(c) To report to the Secretariat on measures taken in accordance with this decision.

- To adopt the following:

Assessment of the state of pollution of the Mediterranean Sea by anionic detergents

Detergents containing anionic surfactants represent 60% of the commercially used surfactants, cationic surfactants used as fabric softeners and disinfectants (quaternary ammonium cationics) represent 10%, while the rest is represented by non-ionic surfactants. Anionic detergents most widely used are LAS (linear-secondary alkylbenzenesulfonate), rapidly degraded by environmental microorganisms, derived from linear alkylbenzenes (LAB) by sulfonation of alkylbenzene with H_2SO_4 or SO_3 . Degradation of anionic detergents in sewage treatment plants before reaching natural waters is not always complete, and alkyl phenols which are highly toxic to fish and small water invertebrates may be formed during aerobic and especially during

anaerobic treatment in anoxic conditions. It has been demonstrated that primary biodegradation of LAS in estuarine waters depends strongly upon several factors such as the origin of the bacterial culture, the temperature conditions and the structure of alkylbenzenes.

The most important sources of anionic detergents in the Mediterranean Sea are land-based sources, and the detergents are introduced into the marine environment directly from outfalls discharging into the sea or through coastal dispersion and indirectly through rivers, canals or other watercourses, including underground watercourses, or through runoff. Information on the amount of anionic detergents reaching the Mediterranean Sea is sparse. A pilot monitoring survey carried out in 1992 provided some more information on levels of anionic detergents. Levels in seawater ranged from 0.01 to 4.2 $\mu\text{g L}^{-1}$, in effluents from 0.11 to 34.07 $\mu\text{g L}^{-1}$ and in rivers from 0.06 to 26.86 $\mu\text{g L}^{-1}$. This study, however, had to be restricted to a few coastal areas and the results cannot be interpreted as providing any indication of the situation prevailing in the Mediterranean as a whole. Overall assessment of the situation with regard to the Mediterranean was made on the basis of current knowledge at global level, taking into consideration the existing differences in sampling and analytical techniques. For the purpose of the study, the levels of concentration were determined by methylene blue active substances (MBAS) and LAS.

Considering that the ingestion of small quantities, even repeatedly, of seawater polluted by anionic surfactants may be regarded as free of risk, the poor percutaneous absorption and the low toxicity of anionic detergents suggest that there appears to be no risk to human health through contact with detergent-polluted seawater, provided that concentrations in any particular locality do not reach levels sufficient to produce visible foam on the surface. Nevertheless, it must be borne in mind that another effect of detergents on the skin barrier is that it allows the absorption of other compounds which are temporarily present.

Concentrations of anionic detergents measured in the Mediterranean Sea may represent a risk for marine biota on all those occasions when they reach levels of effect. The danger to fish comes from exposure of the gill tissues to the detergent rather than from ingestion. Very important toxic effects are experienced by fish swimming in water containing LAS (or other detergents) at low (few $\mu\text{g L}^{-1}$) concentrations. It must also be taken into account that no data are available to support the hypothesis of a widespread risk for marine biota in the Mediterranean Sea from anionic detergents, but only some which may lead to the belief that there are some risk situations where high amounts of non-degraded anionic detergents are present in seawater, especially in areas where there is a discharge of untreated sewage wastes.

In a number of Mediterranean countries, detergents are limited by legal restriction with regard to their discharge into the marine environment. Such restrictions generally refer to the use of a high percentage of anionic detergents and to permissible concentrations of detergents in the discharges as well as in the sea.

- To adopt the following:

Measures for the control of pollution by detergents

The Contracting Parties, bearing in mind article 4 paragraph 1 of the Barcelona Convention and article 6 and Annex II of the Land-Based Sources Protocol as well as the principle of precautionary approach adopted by them at their 6th Ordinary Meeting (Athens, 3-6 October 1989), taking also into account the high percentage of use of anionic detergents as compared to non-anionic ones, and of the fact that anionic detergents are rapidly degraded in the environment, consider that a holistic approach has to be made for detergents in general. The Contracting Parties also, taking into consideration the conclusions of the UNEP/WHO document (UNEP(OCA)/MED WG.104/Inf.5) on the assessment of the state of pollution of the Mediterranean sea by anionic detergents,

agree to take the following action as from 1 January 1998:

- (a) to promote measures to reduce inputs into the marine environment of non- biodegradable detergents by restricting the use of detergents to those which are reasonably (90%) biodegradable;
- (b) to reduce the input of detergents in identified hot-spot areas. Such actions would have to be individually tailored to suit the conditions prevailing in each particular locality so identified;
- (c) to monitor the level of detergents in coastal recreational areas. As a routine measure this could be done visually, with analysis only resorted to when any particular circumstance so demands;
- (d) whenever possible, monitoring of detergents in effluents be made a component of pollution source monitoring within the framework of MED POL;
- (e) to report to the Secretariat on all measures taken in accordance with this decision.

- To adopt the following:

Assessment of the state of microbiological pollution of the Mediterranean Sea

A considerable number of species and strains of pathogenic microorganisms, including mainly bacteria and viruses, but also fungi and protozoa, are known to be present in varying degrees of population density in Mediterranean coastal waters. Some of these are endemic in a number of Mediterranean areas. A number of algal species producing biotoxins affecting man mainly through consumption of contaminated shellfish have also been identified in various parts of the Mediterranean, and are posing a risk in areas where local conditions lead to eutrophication and the development of algal blooms.

The diseases and disorders associated with infection by such pathogenic organisms have been recorded both among local Mediterranean populations and among tourists visiting the region. Except under specific circumstances, however, it is difficult to link infection with bathing in polluted coastal marine areas, or consumption of contaminated shellfish, as practically all such diseases and disorders can result from causes other than marine pollution. In the case of a number of non-gastrointestinal diseases contracted through bathing, it is being recognized that the cause may be high bather density rather than polluted seawater.

In conformity with global practice, the rationale for developing and enforcing seawater and shellfish quality criteria and standards in all Mediterranean countries is through the establishment of upper concentration limits of one or more bacterial indicator organisms as an index of acceptability or otherwise. Criteria and standards for bathing waters vary in the different countries, most of them being based either on the interim criteria for bathing waters adopted by the Contracting Parties to the Barcelona Convention and Protocols in 1985, or on the 1975 EC Directive on the quality of bathing waters. There is a similar variation between the different national criteria and standards for shellfish waters.

Records for bathing water monitoring for the period 1983 to 1992 from thirteen Mediterranean countries submitting their data to MED POL and assessed on the basis of conformity with the 1985 interim criteria for bathing waters appear to show reasonable microbiological quality, but cannot be properly evaluated owing to non-compliance with the stipulated monitoring frequency. These records, however, are known to present an incomplete picture of actual monitoring programmes in at least some Mediterranean states. On the other hand, the quality of bathing waters in the four Mediterranean EC Member States, assessed on the basis of compliance with the guide values of the 1975 EC bathing water Directive, show a positive trend over the last few years, probably as a result of improved wastewater management practices. The two sets of criteria and standards are not directly comparable. In the case of shellfish waters, no monitoring data is available since the completion of the first phase of MED POL in 1981.

Recent international epidemiological data have cast doubts on the validity of current indicator bacteria as an accurate index of pathogen presence and density, in view of the longer survival of the latter in seawater and shellfish and greater resistance (particularly in the case of viruses) to conventional sewage treatment, as compared to the former. The results of the studies in question have also accentuated the need for reliance on multiple, as opposed to single, indicator bacteria, supplemented by monitoring for the more serious pathogens at appropriate times. There is now sufficient data on the basis of which criteria and standards of a more permanent nature than the interim ones adopted in 1985 can be developed, in order to ensure adequate health protection for both local populations and tourists using coastal marine recreational amenities. In view of the lack of data, the matter of shellfish requires further study.

While the general situation can be said to have improved to a variable extent over the Mediterranean region, an acceleration of effort in achieving those targets listed in the 1985 Genoa Declaration related to the establishment of sewage treatment plants and submarine outfall structures is necessary in order to further reduce marine pollution and its resultant threats to human health.

- To adopt the following:

Measures for prevention and control of microbiological pollution

The Contracting Parties, bearing in mind the targets relating to the establishment of sewage treatment plants and submarine outfall structures contained in the Genoa Declaration and the interim environmental quality criteria for bathing waters, adopted for a transitory period during their Fourth Ordinary Meeting in Genoa from 9 to 13 September 1985, as well as the criteria for shellfish waters, adopted during their Fifth Ordinary Meeting in Athens from 7 to 11 September 1987, and taking into consideration the conclusions of the UNEP/WHO document (UNEP(OCA)MED WG.104/Inf.9) on the new assessment on the state of microbiological pollution of the Mediterranean Sea, completed in December 1995,

Agree to take the following action as from 1 January 1998:

- (a) in order to provide further safeguards against risks to human health through bathing, to adopt new quality criteria and standards for bathing waters as set out in the attached annex;
- (b) to observe the terms of the measure on the criteria for shellfish waters, adopted during their Fifth Ordinary Meeting in 1987, and to ensure that this is supplemented by adequate health or marketing legislation on shellfish quality to protect the consumer from contaminated produce;
- (c) to promote, both within the framework of MED POL and otherwise, the following studies:
 - Microbiological surveys to satisfy the requirement for a more comprehensive catalogue of the presence and (where feasible) density of pathogenic microorganisms in sewage effluents and in those marine areas (recreational and shellfish-growing) known to be affected by such effluents. This would provide essential data for the design of new sewage treatment facilities and outfall structures in such localities, and for any possible modifications required in the case of existing ones;
 - Epidemiological studies (i) on the correlation between recreational water quality and observed health effects on exposed population groups, covering the main water sport activity areas (including bathing), (ii) correlating the incidence of specified diseases and disorders with beach overcrowding,

and (iii) aimed at identifying the extent to which contaminated seafood (as opposed to other sources) is responsible for the incidence of gastrointestinal diseases and disorders in both local populations and tourists;

- Microbiological studies correlating the density of bacterial indicator organisms with the presence and density of pathogens such as *Salmonella*, and studies that will try to interpret the real pathogenic significance of pathogens such as *Salmonella* and enteroviruses in seawater samples;
 - Studies: (i) on the development of less expensive techniques for determination of viruses, and (ii) on the survival and adaptation of pathogenic and indicator microorganisms released into the Mediterranean marine environment, including the mechanisms responsible for change;
- (d) to include, to the extent possible, all public coastal recreational beaches in their national and local coastal recreational water quality monitoring programmes, and include all ongoing programmes in this field in their national agreements with the Secretariat within the framework of MED POL;
- (e) to accelerate the establishment of sewage treatment plants and submarine outfall structures in the appropriate cities and towns, in order to further prevent pollution by sewage at source, and achieve the relative targets contained in the 1985 Genoa Declaration by the earliest possible date:
- (f) to provide the Secretariat to the Convention and Protocols with the fullest information possible on:
- (i) all updates on legislation and administrative measures on national criteria and standards for coastal recreational and shellfish waters; and
 - (ii) measures taken in terms of (a).

ANNEX

CRITERIA AND STANDARDS FOR MEDITERRANEAN COASTAL BATHING WATERS

1. Coastal bathing waters means all seawater areas in which:
 - bathing is not prohibited, and is traditionally practiced by a number of bathers sufficient for the competent national authorities to consider the area as a bathing area.
2. Contracting Parties shall identify the bathing areas under their jurisdiction in terms of paragraph 1. above.
3. Coastal bathing waters shall conform to the quality standards set out in the attached Table to this Annex.
4. Any Contracting Party may establish more stringent standards for bathing waters than as specified in the attached Table, and may establish values for additional parameters not included in such Table.
5. Where pollution constitutes a threat to Public Health, the competent national authorities shall prohibit, on a temporary or permanent basis as appropriate, bathing at individual bathing areas. Such a threat shall be deemed to exist in a case of significant deviation from the standard values specified in the attached Table, or where the presence or density of any pathogenic microorganism, or the concentration of any chemical substance, is considered significant by the competent national authorities. In each case, local conditions shall be taken into account.
6. Adoption or acceptance of these criteria and standards by any Contracting Party issuing, in its capacity of an International or Intergovernmental Organization, any legal instrument or directive regarding the quality of bathing waters, particularly where such legal instrument or directive includes coverage of non-Mediterranean waters, shall not in any way affect such legal instrument or directive.

TABLE

Parameter	Concentrations not to be exceeded in		Minimum number of samples	Analytical method	Interpretation method
	80% of the samples	95%			
Faecal coliforms per 100 ml	100	2000	10*	Membrane filtration, m-FC broth or agar incubated at $44.5 \pm 0.2^{\circ}\text{C}$ for 24h, or Multiple Tube technique, A-1 broth at $44.5 \pm 0.2^{\circ}\text{C}$ for 24h. Confirmation in McConkey or EC broth	Graphical or Analytical adjustment to a log-normal probability distribution
Faecal streptococci per 100 ml	100	400	10*	Membrane filtration, <i>M-enterococcus</i> agar incubated at $36 \pm 1^{\circ}\text{C}$ for 48h, or Multiple tube technique, Azide dextrose broth at $35 \pm 0.5^{\circ}\text{C}$ for 48h. Confirmation in Ethyl violet azide broth at $35 \pm 0.5^{\circ}\text{C}$ for 24-48h	
<i>Salmonella</i> per 1 Litre		0	**	Concentration by membrane filtration. Inoculation on a standard medium. Enrichment - subculturing or isolating agar - identification.	
Enteroviruses CFU per 10 Litres		0	**	Concentration by filtration, flocculation or centrifuging and confirmation	

* sampling to be performed at least fortnightly during the bathing season.

** sampling to be performed whenever a threat to public health through the presence of the microorganisms is suspected.

ANNEX I

TERMS OF REFERENCE OF THE ADVISORY GROUP OF EXPERTS FOR MED POL

1. The institutional arrangements of MAP Phase II provide for the establishment of advisory groups. The Advisory Group of Experts for MED POL will advise the Secretariat and the Meeting of MED POL National Coordinators on the scientific and technical aspects of the design, development and implementation of MED POL-Phase III.
2. More specifically, it will advise on:
 - the technical details (parameters, matrices, stations, sampling frequency methodology, quality assurance, etc.) concerning the establishment of a coastal zone trend monitoring programme;
 - the technical details (biomonitoring techniques, stations, species, sampling frequency, methodology, quality assurance, etc.) concerning the establishment of a biological effects monitoring programme;
 - the technical details (sampling design and frequency, methodology, quality assurance, statistical aspects, interpretation and utilization of results, etc.) concerning the establishment of a compliance monitoring programme;
 - the technical aspects of the implementation of the Land-based Sources protocol;
 - the evaluation and utilization of MED POL data and information;
 - any other aspect of MED POL as decided by the National Coordinators.
3. The Advisory Group will consist of a core group of 4-6 Mediterranean experts to be nominated for a 4-year term by the Meeting of MED POL National Coordinators on the basis of a proposal made by the Secretariat.
4. The core group will be assisted, if necessary, by additional experts when it deals with specific subjects. These experts will be selected by the Advisory Group in consultation with the Secretariat.
5. The travel and subsistence expenses of the members of the group and the invited additional experts will be covered by the Secretariat.
6. The Group will meet as necessary but at least once a year. The meetings of the groups will be announced to the Contracting Parties which may wish to send observers at their own cost.

ANNEX II

The meeting of experts on airborne pollution (Paris, November 1994) in accordance with a decision of the 7th Meeting of the Contracting Parties (UNEP(OCA)/MED IG.2/4, Annex IV, page 17) concerning the establishment of an expert group on airborne pollution, prepared the following proposal for the terms of reference of such an expert group and is submitted to the Meeting of MED POL National Coordinators for consideration and adoption, as appropriate:

TERMS OF REFERENCE OF THE EXPERT GROUP ON AIRBORNE POLLUTION OF THE MEDITERRANEAN SEA

1. To coordinate and to guide the airborne pollution monitoring and modelling in the participating countries, and in particular:
 - to recommend suitable and reliable sampling and analytical procedures paying due attention to the need for periodic intercalibrations and intercomparisons to ensure high quality of the collected data;
 - to analyze monitoring data submitted by participating institutions and evaluate their quality;
 - to encourage the development, intercomparison, and application of appropriate models for constructing deposition fields, evaluating the origin of airborne pollutants and for applying these models for the development of pollution control measures;
2. To recommend methodologies for collecting emission data in the Mediterranean countries and emission data reporting procedures and promote the emission inventories;
3. To coordinate preparation of periodic assessment of pollution of the Mediterranean Sea through the atmosphere;
4. To advise the Contracting Parties to the Barcelona Convention on matters related to airborne pollution of the Mediterranean Sea Area, especially on the need for measures to reduce the pollution of the Sea, arising from emissions to the atmosphere;
5. To establish and maintain close cooperation with other relevant international programmes and organizations concerned with long-range and transboundary airborne pollution and to promote collaboration of the national institutes in the Mediterranean region in this field;
6. To report on its activities to the Meeting of MED POL National Coordinators.