



United Nations Environment Programme



UNEP(DEC)/MED/WG.264/4 5 May 2005

ENGLISH



MEDITERRANEAN ACTION PLAN

Meeting of the MED POL National Coordinators

Barcelona, Spain, 24 - 27 May 2005

DRAFT

PRINCIPLES AND OBJECTIVES OF MED POL PHASE IV (2006-2013)

CONTENTS

	Page
PART I	1
BACKGROUND Evolution of MED POL and its objectives Legal and operational framework of MED POL Experience gained through MED POL	1 1 4 7
CONTEMPORARY INITIATIVES AND TRENDS IN POLLUTION CONTROL	8
PART II	14
TOWARDS MED POL PHASE IV (2006-2013): PROPOSED APPROACHES Visions Overall objectives and goals Basic principles and assumptions Scope (content) Modalities of implementation Sustainable implementation of MED POL	14 15 15 16 18 22 24
ANNEX Acronyms and Abbreviations	26

PART I

BACKGROUND

Aside from the physical degradation of the Mediterranean coastal (terrestrial and marine) regions and the decline of its biological resources, pollution of the Mediterranean Sea originating from a large variety of terrestrial and maritime sources and activities is presently one of the major problems threatening the Mediterranean Basin ¹. Therefore, pollution control is considered among the most important approaches to halt effectively, and eventually reverse, the continuing degradation of the Mediterranean, as a contribution to the process of achieving sustainable development.

While the primary responsibility for pollution control rests with the national authorities of the Mediterranean countries, action taken at the level of individual countries can be fully effective only if taken as part of concerted efforts of all countries sharing the same sea. Namely, there are no physical barriers that would prevent the spread of pollutants once they reach the sea and therefore their impact is not restricted to the vicinity of the point where they enter the sea but is felt in a much wider area. This obvious fact was recognised by the governments of the Mediterranean countries in the mid-1970s by the adoption of the **Mediterranean Action Plan** (1975) and by signing of the **Barcelona Convention** (1976) which became their common framework for the protection of the Mediterranean Sea.

Evolution of MED POL and its objectives

The present Programme for the Assessment and Control of Pollution in the Mediterranean Region – MED POL evolved, as the environmental assessment and pollution control component and integral part of the Mediterranean Action Plan (MAP), and became MAP's first operational programme. It was adopted in 1975 by the very first intergovernmental meeting of the Mediterranean coastal States, called by UNEP to consider the formulation of a broad and complex programme for the protection of the Mediterranean region.

The declared objectives of the first phase of MED POL (MED POL I, 1975-1980) were²:

to formulate and carry out a coordinated pollution³ monitoring and research programme taking into account the goals of the Mediterranean Action Plan and the capabilities of the Mediterranean research centres to participate in it:

¹ Pollution of the Mediterranean Sea is not the only environmental problem of the Mediterranean Basin. A recent study (GESAMP: A Sea of Troubles. GESAMP Reports and Studies No.70. 1991) identifies the following as the main present threats to the marine environment: (i) destruction and alteration of habitats; (ii) overfishing and the effects of fishing on the environment; (iii) effects of sewage and chemicals on human health and the environment; and (iv) increasing eutrophication. The environmental, social and economic impact of expected changes in the climatic conditions will, in the long-term, further exacerbate the already experienced problems listed above.

²The objectives of the past and present phases of MED POL are quoted from document: MED POL Phase III – Programme for the assessment and control of pollution in the Mediterranean Region. MAP Technical Reports Series No. 120. UNEP, Athens, 1999.

³ In the context of Med pol phase I, "pollution of the marine environment" is interpreted according to the definition adopted in the United Nations Convention on the Law of the Sea

UNEP(DEC)/MED WG.264/4 Page 2

- to assist national research centres in developing their capabilities to participate in the programme;
- to analyse the sources, levels, pathways, trends and effects of pollutants relevant to the Mediterranean Sea:
- to provide the scientific/technical information needed by the Governments of the Mediterranean States and the EEC for the negotiation and implementation of the Convention and its related Protocols; and
- to build up consistent time-series of data on the sources, pathways, levels and e ffects of pollutants in the Mediterranean Sea and thus contribute to the scientific knowledge of the Mediterranean Sea.⁴

In the implementation of these, somewhat over ambitious objectives, the first phase focused on:

- mobilising the participation of scientific institutions of the Mediterranean countries in seven monitoring and research projects dealing with the environmental problems perceived as the major pollution problems of the Mediterranean Sea;
- enhancing the institutional and manpower capabilities of developing Mediterranean countries to enable their meaningful participation in these projects; and
- development of guidelines and methodologies for the implementation of the agreed programme.

In 1981, the second phase of MED POL (**MED POL II, 1981-1995**) was initially approved for a ten year period which was later extended until 1995. The objectives of the programme were to provide the Parties to the Barcelona Convention with:

- information required for the implementation of the Convention and the Protocols;
- indicators and evaluation of the effectiveness of the pollution prevention measures taken under the Convention and the Protocols;
- scientific information that may lead to eventual revision and amendment of the relevant provisions of the Convention and the Protocols, and for the formulation of additional protocols;
- information that 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; and

and the Barcelona Convention (as amended in 1995) as: the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

⁴Throughout the present document, quotes from other documents and printed in italics.

periodic assessment of the state of pollution of the Mediterranean Sea.

Initially the programme continued focusing on pollution-related monitoring and research but gradually broadened its scope in order to follow the trends indicated by the Programme of Action for Sustainable Development (Agenda 21) adopted at the 1992 United Nations Conference on Environment and Development (UNCED), and to bring it closer to the other components of MAP, in particular to the implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (LBS Protocol) and the Coastal Areas Management Programme (CAMP) of MAP.

The development of the present phase of MED POL (**MED POL III, 1996-2005**) was initiated in 1993⁵ and formally approved in 1996⁶, with the following set of specific objectives:

- assessment of all (point and diffuse) sources of pollution, the load of pollution reaching the Mediterranean Sea, and the magnitude of the problems caused by the effects of contaminants on living and non-living resources, including human health, as well as on amenities and uses of the marine and coastal regions;
- ♦ assistance to countries, including capacity building, in the development and implementation of national action plans for the elimination of marine pollution, in particular from land-based sources;
- assessment of status and trends in the quality of the marine and coastal environment as an early warning system for potential environmental problems caused by pollution;

⁵ Recommendation 7.2 of the Eight Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Antalya, 12-15 October 1993) called for the development of MED POL Phase III with the following objectives:

• organisation of a Mediterranean coordinated marine pollution monitoring and research programme, concentrating on contaminants and pollutants affecting the quality of the marine and coastal environment, as well as the health of man and of the living resources in the Mediterranean and interpretation/assessment of the results of the programme as part of the scientific basis for decision-making in the region;

• generation of information on the sources, levels, amounts, trends (trend monitoring) and effects of marine pollution, development of capabilities for assessing the present and future state of the marine environment within the Mediterranean region as an additional component of the scientific basis upon which the formulation of proposals for preventive and remedial action can be based;

• formulation of proposals for technical, administrative and legal programmes and measures for the prevention and/or reduction of pollution;

• strengthening and, when necessary, development of the capabilities of the national institutions, in accordance with the circumstances and the country requesting it, so as to implement monitoring and research of pollution of the marine environment; and

♦ assistance, as appropriate, to Contracting Parties for the implementation of the recommendations adopted with a view to the assessment of their effectiveness; this assistance will allow the competent authorities to verify the recommendations adopted taking into account data of a satisfactory standard.

⁶Extraordinary Meeting of the Contracting Parties to the Barcelona Convention (Montpellier, 1-4 July 1996).

- formulation and implementation of action plans, programmes and measures for the prevention and control of pollution, for the mitigation of impacts caused by pollution and for the restoration of systems already damaged by pollution; and
- monitoring of the implementation of the action plans, programmes and measures for the control of pollution and the assessment of their effectiveness.

While retaining the assessment of pollution and provision of support to national institutions (i.e., capacity building) as its important functions, pollution control was made the new focus of MED POL III. As in the previous phases of MED POL, the assessment was expected to be based on data reported by national institutions participating in the programme. The assessment programme was envisaged to serve as the basis for the pollution control programme consisting of two major elements: (i) development of pollution control measures and targets; and (ii) pollution monitoring as an indicator for the effective implementation of these measures (compliance monitoring).

The specific objectives, activities and means of implementation for each of its main three functions, as well as the basics related to the monitoring of the levels and effects of contaminants, were defined in 1996, at the adoption of MED POL III. The operational details related to compliance monitoring, trend monitoring and biomonitoring were adopted a year later (1997) as essential tools for the formulation and implementation of national monitoring programmes.⁷

However, with the adoption of the SAP in 1997 and the launching of its operational phase in 2000, the tasks –and, accordingly, the objectives- of MED POL increased in coverage from the original ones to meet the new needs. Although the MED POL Programme was formally entrusted with the responsibility to follow up the implementation of the SAP, no formal amendments were made to the original objectives of MED POL Phase III.

Legal and operational framework of MED POL

The relevant provisions of the Barcelona Convention (Art. 5, 8 and 11) and of the protocols associated with the Convention, as well as the MED POL-related decisions of the Contracting Parties to the Convention provide the legal and the basic operational framework for the activities of MED POL.

Articles 5, 8 and 11 of the **Barcelona Convention**, as amended in 1995⁸, stipulate the obligation of the Contracting Parties to *take all appropriate measures to prevent, abate, and to the fullest extent possible eliminate the pollution of the Mediterranean Sea Area⁹ from pollution:*

⁷ For the integral description of MED POL III, including the operational details of the three monitoring programmes, see MAP Technical Report Series No.120, Athens, 1999.

⁸ Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean. The amended version of the Convention has entered into force on 9 July 2004.

⁹ The Marine Sea Area is defined by the Convention as the maritime waters of the Mediterranean Sea proper, including its gulfs and seas and envisages that the application of the Convention may be extended to coastal areas as defined by each Contracting Party within its own territory. (Article 1 of the Convention).

- (i) caused by dumping from ships and aircraft or incineration at sea;
- (ii) from land-based sources:
- (iii) from transboundary movements of hazardous wastes and their disposal;

In addition, Article 10 of the Convention contains the obligation of the Parties to take all appropriate measures to protect and preserve biological diversity, rare and fragile ecosystems, as well as species of wild fauna an flora which are rare, depleted, threatened or endangered, and their habitats, while Article 12 envisages that the Parties shall endeavour to establish a pollution monitoring system for the Mediterranean Sea Area.

The protocols associated with the Convention - in particular the Dumping Protocol, the LBS Protocol and the Hazardous Waste Protocol - contain additional provisions relevant to MED POL.

In addition to the area falling into the geographical scope of the Barcelona Convention, according to Article 3 of the **LBS Protocol**, as amended in 1996, the provisions of the Protocol are applicable also to:

- (i) the hydrological basin of the Mediterranean Sea Area;
- (ii) waters on the landward side of the baseline from which the breadth of the territorial sea is measured and extending, in the cases of watercourses, up to the freshwater limit: and
- (iii) brackish waters, coastal salt waters including marshes and coastal lagoons, and around waters communicating with the Mediterranean Sea.¹¹

Articles 7 and 8 of the Protocol call for the formulation and adoption of *common guidelines*, standards and criteria related to the reduction and elimination of pollutants entering the Protocol area, and for the establishment of national monitoring programmes with two goals:

- (a) to assess systematically, as far as possible, the levels of pollution along their coasts, in particular with regard to the sectors of activity and categories of substances listed in annex I, 12 and periodically to provide information in this respect; and
- (b) to evaluate the effectiveness of action plans, programmes and measures implemented under the Protocol.

¹⁰ Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (adopted in 1976, amended in 1995). Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (adopted in 1980, amended in 1996). Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (adopted in 1996). The amended versions of the LBS and the Dumping Protocols, and the Hazardous Wastes Protocol are not in force yet.

¹¹ The definition of the geographic area covered by the Protocol does not specify whether the whole Mediterranean hydrological basin is included in the area or only its small part, i.e. up to the freshwater limit of watercourses.

¹² Annex I of the Protocol specifies the *Elements to be taken into Account in the Preparation of Action Plans, Programmes and Measures for the Elimination of Pollution from Land-Based Sources and Activities.*

Articles 9 and 10 of the Protocol envisage scientific and technical cooperation of the Parties in a number of fields, particularly research on inputs, pathways and effects of pollutants, and bilateral or multilateral cooperation in programmes of assistance to developing countries.

The Strategic Action Programme to Address Pollution of the Mediterranean Sea from Land-Based Activities (SAP) was adopted in 1997¹³ by the Parties to the Barcelona Convention as the extension of the LBS Protocol and its operational framework for concrete action. It follows the spirit of the LBS Protocol adopted a year earlier and the tenets embodied in the Global Programme of Actions for the Protection of the Marine Environment from Land-Based Activities (reviewed in the next section of the present document).

When adopting the SAP, the Parties to the Convention agreed to accord priority to integrated pollution control as an important part of the move towards a more sustainable balance between human activity and socio-economic development, on the one hand, and the resources and regenerative capacity of nature, on the other SAP envisages concrete and quantified pollution reduction targets, to be achieved by the years 2005, 2010 and 2025, in urban and industrial sectors, as well as targets related to physical alterations of environment and destruction of habitats. The latter include, among other tasks, the establishment of environmental quality criteria (EQC) at regional level. 15

The monitoring programme of SAP was expected to be set up by the year 2000 and carried out through four activities:

- monitoring programmes of the priority pollutants identified by SAP and of the quality of the marine environment;
- a permanent river water quality/quantity register;
- system of inspection systems; and
- monitoring programme of discharges and emissions of priority pollutants identified by SAP and the quality of the marine environment.¹⁶

Action at national levels is seen as central for the success of SAP. National programmes for the implementation of SAP are expected to be included in National Action Plans for SAP, with the understanding that they should be coordinated and harmonised, as appropriate, at the level of MAP. MED POL is envisaged as SAP's *accompanying activity*.¹⁷

¹³ Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Tunis, 18-21 November 1997)

¹⁴ Strategic Action Programme to Address Pollution from Land-Based Activities. Page 5. UNEP, Athens, 1999.

¹⁵ The Operational Document for the Implementation of SAP asks for the formulation and adoption, as appropriate, environmental quality criteria and standards for point source discharges of pollutant from industrial sources. (page 36 of the Operational Document).

¹⁶ Strategic Action Programme to Address Pollution from Land-Based Activities. Page 33. UNEP, Athens, 1999.

¹⁷ SAP Operational Document, page 54.

The **Dumping Protocol**, as amended in 1995, contains a general prohibition for dumping wastes into the Mediterranean Sea. Articles 4 and 5 of the Protocol allow the dumping of a few categories of wastes, provided prior special permits are obtained from the competent national authorities. In Article 6 of the Protocol, the formulation and adoption of *criteria*, *guidelines and procedures* for the dumping of these wastes is envisaged. The Annex to the Protocol lists the factors to be considered in establishing criteria governing the issue of permits for dumping which, among others, include an assessment of the effects on amenities, marine life, fisheries, aquaculture, and other uses of the sea, and specifies that when issuing a permit for dumping, the Contracting Parties shall endeavour to determine whether an adequate scientific basis exist for assessing the consequences of such dumping.

The **Hazardous Wastes Protocol** was adopted to harmonise, at the level of the Mediterranean, the approach of the Mediterranean countries with relevant global and regional legal agreements dealing with movement and disposal of hazardous wastes and to provide the legal framework for the creation of a Mediterranean-wide hazardous waste audit. Among the general obligations of the Parties to the Protocol are to reduce and eliminate (*if possible*) transboundary movement of wastes defined in the annexes to the Protocol, to control pollution caused by transboundary movement and disposal of these wastes, and *to reduce to a minimum, and where possible eliminate, the generation of hazardous wastes.* Article 8 of the Protocol requires the Parties to *submit annual reports to the Organisation regarding the hazardous wastes they generate and transfer within the Protocol area in order to enable the Organisation to produce a hazardous waste audit.*

Experience gained through MED POL

It is beyond the scope of this document to present a detailed account of the rich experience gained through the past and the present phase of MED POL. Ne vertheless, the following could be specifically highlighted:

- MED POL proved to be a dynamic programme which succeeded to mobilise and attract the cooperation of a large number of Mediterranean scientific institutions from all Mediterranean countries and the support of numerous United Nations bodies, as well as other relevant global and regional organisations.
- MED POL played a crucial role in generating valuable information on the state of the Mediterranean marine environment - which was, prior to 1975, practically non-existent for large parts of the Mediterranean, - and in identifying the most important environmental problems related to marine pollution which was used as a basis for the formulation of pollution control measures adopted by the Parties to the Barcelona Convention.
- MED POL was not static but followed the changing requirements of MAP and the evolving global trends in environmental protection. The gradual shift from the original emphasis on pollution assessment to the present focus on pollution control was the most important and easily recognisable trend in the evolution of MED POL. Largely thanks to this shift, MED POL is at present well embedded in the structure of MAP through its linkages with the other components of MAP as well as with a number of global initiatives and trends related to marine pollution control.

¹⁸ Specifically, the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (1996), the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991), the IVth ACP/EEC Convention (Lome, 1989).

◆ In recognition of MED POL's importance and potentials, the MED POL Programme became the MAP Implementing Agency for the Strategic Action Programme to Address Pollution from Land-Based Activities (SAP)¹⁹ adopted, in 1997, in the context of the Protocol for the Protection of the Mediterranean Sea against Pollution from Lad-Based Sources (LBS Protocol).

These undoubtedly remarkable accomplishments were, however, accompanied by a number of weaknesses. Thus, for instance, MED POL did not achieve satisfactorily some of its major original objectives, such as to carry out a truly Mediterranean-wide coordinated pollution monitoring programme or to build-up easily accessible consistent time-series of pollution-related data. The reasons for failure in these and some other fields must be carefully analysed before a decision is taken to continue in MED POL IV with activities that proved to be consistently difficult or intractable.

CONTEMPORARY INITIATIVES AND TRENDS IN POLLUTION CONTROL

The first global plan of action for the protection of the environment was designed, more than thirty years ago by the United Nations Conference on Human Environment – UNCHE (Stockholm, June 1972). Fifteen years later, in examining the legacy of the Conference, the Bruntland Commission considered that in spite of many valiant efforts and some successes, the hopes that the accelerating deterioration of the environment will be halted, and eventually reversed, generally proved to be elusive goals. Marine environment was no exception. In searching for remedies, the Commission concluded that *looking to the next century, the Commission is convinced that sustainable development, if not survival itself, depends on significant advances in the management of the oceans.*

Management of the oceans, in the widest possible meaning of this word, is today a universally adopted approach to safeguard the future of the oceans as a key element in maintaining life on the Earth as we know it, and to ensure the use of its resources and amenities on a sustainable basis. In order to achieve these goals, various trends have been followed and a considerable number of global and regional initiatives has been launched during the last decade. Many of these trends and initiatives are highly relevant for shaping of MED POL IV and those deemed the most important are therefore reviewed in the ensuing paragraphs.

The Programme of Action for Sustainable Development (**Agenda 21**) adopted in Rio de Janeiro at the 1992 United Nations Conference on Environment and Development (UNCED) – dubbed rightly as the **Earth Summit** - was a major global action-oriented attempt to turn the world from its self-consumptive course to one of renewal and sustenance²². The Conference recognised the inseparable nature of the problems besetting the marine and coastal environment and therefore addressed them in a single Chapter covering also the

¹⁹ Operational Document for the Implementation of SAP. UNEP(DEC)/MED.WG.183/6, page 21. UNEP, Athens, 2001.

²⁰ See: Report of the meeting of the MED POL National Coordinators, Sangemini, 27-30 May 2003. UNEP(DEC)MED WG.231/25, paras 64-66.

²¹ Report of the (Brundtland) World Commission on Environment and Development ("Brundtland Commission"): Our Common Future. Oxford University Press, 1987.

Words of Maurice F. Strong, Secretary General of the Conference. In: Foreword to Agenda 21. United Nations, 1992.

protection, rational use and development of living resources.²³ The introductory paragraph of the Chapter emphasises that the marine environment – including the oceans and all seas and adjacent coastal areas – forms an integrated whole that requires new approaches to marine and coastal area management and development, approaches that are integrated in content and are precautionary and anticipatory in ambit. The programme of action adopted under the Chapter is organised in three substantive sections: (i) integrated management and sustainable development of marine areas; (ii) marine environmental protection; and (iii) sustainable use and conservation of marine living resources.

As a follow up to the results of the Rio de Janeiro Summit, a **Mediterranean Commission for Sustainable Development (MCSD)** was established by the Contracting Parties in 1996 in the framework of the Barcelona Convention. Set up as an advisory body to MAP, the Mediterranean Commission on Sustainable Development (MCSD) is a think-tank on policies for promoting sustainable development in the Mediterranean basin. As sustainable development concerns the merging of environment and development, its implementation requires the participation of the society as a whole. Consequently, 15 representatives of local authorities, business groups and environmental NGOs are placed on an equal footing with 22 representatives of the Contracting Parties as MCSD members.

The Commission, embodied in, and provided with administrative support by, MEDU, makes recommendations to Contracting Parties on future actions relating to key Mediterranean themes for the promotion of sustainable development in areas such as tourism, trade, industry and urban management. After preparing in 2001 a Strategic Review for sustainable development, the Commission will review and adopt in 2005 a **Mediterranean Strategy for Sustainable Development (MSSD)** which will be the basis for the future work of MAP in the years to come. In the Strategy being prepared large emphasis is given to pollution control and in particular to the reduction of industrial and urban pollution as essential elements for the process of achieving sustainable development.

In reviewing the progress in the implementation of Agenda 21, the **World Summit on Sustainable Development** (WSSD), held in Johannesburg, 26 August – 4 September 2002, adopted an **Implementation Plan**²⁴ which, among others:

- calls for development and implementation of national/regional strategies, plans and programmes with regard to integrated river basin, watershed and groundwater management;
- recognises that the oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem:
- encourages the application by 2010 of the ecosystem approach with particular reference to its application in fisheries management and biodiversity protection, as envisaged by the Reykjavik Declaration on Responsible Fisheries²⁵ and decision V/6 of the Conference of Parties to the Convention on Biological Diversity²⁶;

²³ Agenda 21, Chapter 17: Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources. United Nations, 1992.

²⁴Report of the World Summit on Sustainable Development. Annex. Plan of Implementation: paras 26(a); 30 (preamb); 30(d) and 32(c); 30(c), 33(preamb); 36(preamb) and (b); and 109(preamb). United Nations document A/CONF/199/20.

²⁵ FAO document C200/INF/25, Appendix 1.

- promotes integrated multidisciplinary and multisectoral coastal and ocean management;
- calls for advance implementation of the Global Programme of Action for the protection of the Marine Environment from Land-Based Activities, with particular emphasis on municipal wastewater, the physical alteration and destruction of habitats, and nutrients;
- asks for improved scientific understanding and assessment of marine and coastal ecosystems as a functional basis for sound decision-making and for the establishment by 2004 of a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments;
- calls for improved policy and decision-making at all levels through, inter alia, improved collaboration between natural and social scientists, and between scientists and policymakers.

The Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA/LBA) is a UNEP-coordinated programme, adopted by an intergovernmental conference (Washington, 23 October – 3 November 1995). Recognising that most of the pollution load of the oceans, including municipal, industrial and agricultural wastes and run-off, as well as atmospheric deposition, emanates from land-based activities and affects the most productive areas of the marine environment, the Programme aims at preventing the degradation of the marine environment from land-based activities by facilitating the realisation of the duty of States to preserve and protect the marine environment. The Programme is designed to be a source of conceptual and practical guidance. It envisages a series of actions at the national level and emphasises the crucial importance of regional and sub-regional cooperation, most notably in enclosed and semi-enclosed seas. Four objectives of regional cooperation are listed in the Programme:

- identification and assessment of problems;
- establishment of targets and priorities for action;
- development and implementation of pragmatic and comprehensive management approaches and processes; and
- development and implementation of strategies to mitigate and remediate land-based sources of harm to coastal and marine environment

The Programme also calls for intensified international cooperation, specifically the establishment of linkages with the activities of ongoing international programmes monitoring and assessing the state of marine environment and relevant river systems, for example, the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), the Global Ocean Observing System (GOOS) the Global Investigation of Pollution in the Marine Environment (GIPME), the Global Environment Monitoring System/Water, and the World Hydrological Cycle Observing System.

²⁶ Document UNEP/CBD/COP/5/23, Annex III

At the action level, the Programme envisages to address nine "source categories", and for each category describes the basis for action, the objectives and targets recommended to be achieved, as well as the activities expected to be carried out at national, regional and international levels.

The establishment of a clearing-house, supported by the relevant specialised bodies of the United Nations system, was envisaged under the Programme, as a referral system aiming at the *mobilisation of experience and expertise, including facilitation of effective scientific, technical and financial cooperation, as well as capacity building.* A data directory and an information-delivery mechanism are the basic elements of the clearing house.²⁸

As a follow-up to a 2001 decision of UNEP's Governing Council²⁹, intensive consultations are being carried out currently among the interested United Nations bodies, selected governments and secretariats of relevant global and regional programmes (such as MAP) to asses the need for and feasibility of the establishment of a regular process for the assessment of the state of the marine environment (**Global Marine Assessment** – GMA) and the possible scope of such assessment.³⁰ MAP, as a potential contributor to GMA, is involved in these consultations. The WSSD and the United Nations General Assembly³¹ endorsed the development of the GMA, and in 2003 UNEP's Governing Council reconfirmed its earlier decision for the development of the GMA and *urges regional seas programmes*

The source categories identified by the Programme include: sewage; persistent organic pollutants (POPs); radioactive substances; heavy metals; oils (hydrocarbons); nutrients; sediment mobilization; litter; and physical alterations and destruction.

²⁸ For more details about the Programme adopted in Washington see document Global Programme of Action for the Protection of the Marine Environment from Land-Based activities. UNEP(OCA)/LBA/IG.2/7. UNEP, Nairobi, 5 December 1995.

²⁹ Decision 21/13: Global assessment of the state of the marine environment. 21 state of UNEP Governing Council (Nairobi, 5-9 February 2001). The Decision requests the Executive Director, in cooperation with the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation and other appropriate United Nations agencies, the Secretariat of the Convention of Biological Diversity and in consultation with the regional seas programmes to explore the feasibility of establishing a regular process for the assessment of the state of the marine environment, with active involvement by governments and regional agreements, building on ongoing assessment programmes.

Until now only GESAMP, an interagency group of experts appointed in their personal capacity, was preparing periodic comprehensive assessments on the state of the global marine environment. The initiative for the establishment of the GMA was prompted by the desire to make the preparation of assessments more regular and transparent, and open to involvement of governments. It should be noted that there are also other bodies and programmes working on global assessments of the state of the marine environment which partially meet the goals envisaged for GMA. The Global Environment Outlook (GEO) series issued by UNEP periodically cover also the marine environment. The Global International Water Assessment (GIWA), a GEF supported project coordinated by UNEP, is planning to complete, in 2005, a broadly conceived assessment which is expected to analyse also the social and economic "root causes" contributing to the degradation of international waters. The Global Ocean Observing System (GOOS) is an IOC-coordinated programme designed to follow and predict changes in the state of marine and estuarine ecosystems.

³¹ United Nations General Assembly Resolution A/57/141 (December 2002).

and other regional seas agreements to participate and contribute as appropriate to the process.³²

In addition to the global initiatives and trends reviewed in the preceding paragraphs, there is a number of regional ones which would have to be taken into account when considering the scope of MED POL IV. Of particular relevance to MED POL is the sizeable and growing corpus of marine-related policies, programmes and legal acts adopted and promoted by the European Commission and the European Union. Namely, although the advice and rulings promulgated by the Commission and the Union are applicable to the member states of the Union only, Parties to the Barcelona Convention which are not members of the Union may prefer to follow the practice of the Union members. The Union's Euro-Mediterranean Partnership programme which involves all Mediterranean coastal states is a strong incentive to follow such course of action.

The Commission's **Water Framework Directive** (WFD) is of particular importance as one of the key elements of the Directive's Common Implementation Strategy is the *development of informal marine monitoring guidance documents on design of monitoring network. These will cover:*

- (i) criteria for the identification of significant water bodies of the basin or basin districts, and selection of monitoring sites in relation to pressure, impacts and the presence of protected areas;
- (ii) network representation in geographical information system;
- (iii) integration of national existing networks and integration of national networks at European level; and
- (iv) monitoring procedures, protocols for rivers, lakes, transnational waters, coastal waters, artificial and heavily modified water bodies, and groundwater.³⁴

The 6th Environmental Action Programme of the European Union envisages the development of a **European Marine Strategy**, as a thematic strategy for the protection and conservation of the marine environment with the overall aim *to promote sustainable use of the sea and conserve marine ecosystems*. The Strategy is currently being developed with the active participation of MED POL on behalf of the MAP Secretariat.

The Strategy is based on the premise that political commitment to sustainable development should lead to a more integrated approach to policy-making and management because each

²² Decision 22/1 II:Global assessment of the state of the marine environment. 22nd Session of the UNEP Governing Council and Global Ministerial Environment Forum (3-7 February 2003).

³⁸ EU legislation related to fisheries should be particularly noted. Namely, *in contrast to most environment and transport legislation, fisheries management is an exclusive competence of the European Union and Member States are not at liberty to establish national regimes or to enter international agreements regulating this subject. The Union's Common Fisheries Policy (CFP) is presently under review to include <i>improvement in the conservation and protection of marine ecosystems by application of an ecosystem approach and governance, conservation and sustainable use of stocks, reduction of fishing efforts and capacity, reducing the <i>impact of aquaculture, and promoting sustainable fisheries beyond Community waters.* (Communication from the Commission to the Council and the European Parliament: Towards a Strategy to Protect and Conserve the Marine Environment. COM(2002)539, Annex 2, section 1.4. Brussels, 02.10.2002.)

³⁴ Ibid. Annex 3, paragraph 1.1.

policy-sector should consider also the side effects, positive or negative, on the other sectors and the marine ecosystem. Evaluating and managing the long-term consequences of current and future practices on other sectors and on the marine environment, even without full knowledge, will be equivalent to adopting an ecosystem-based approach based on the precautionary principle. The fundamental of ecosystem-based approach lies in the integration of sometimes conflicting demands in protecting and exploiting the marine environment in such a way that it can continue to support these demands in the long-term.³⁵

The Parties to the Barcelona Convention requested that the EU should take full account of the specific features of the Mediterranean marine environment and the concerns of the Mediterranean countries and that the outcomes of activities and programmes carried out by the Convention and its Parties should be duly recognised and taken into account in the preparation and implementation of the Strategy.³⁶

One of the themes (Theme 5: coastal and marine environment) of the **Pan-European Biological and Landscape Diversity Strategy** (PEBLDS)³⁷ addresses the problems which may be relevant to MED POL IV. UNEP (Regional Office for Europe) coordinates the implementation of this theme which envisages, among other issues, the promotion of collaboration among the Europe-based regional seas programmes, development of a European-wide code of conduct and networking of European ecological research institutions.

This review would not be complete without mentioning the trends discernible in the approaches adopted by the European-based **regional seas programmes**, OSPAR and HELCOM³³: focusing on pollution control in hot spots, on critically important pollutants, and on ecosystem-based approach to the protection of the marine environment (including fisheries).³⁹ OSPAR's position on the latter issue may be of particular interest to MED POL IV, and to MAP as a whole too, as it enables OSPAR to examine and consider the impact of

⁵ Communication from the Commission to the Council and the European Parliament: Towards a Strategy to protect and Conserve the Marine Environment. COM(2002)539, paragraph 1.8. Brussels, 02.10.2002.

³⁶ Operative paragraphs 9 and 14 of the Catania Declaration adopted by the meeting of the Contracting Parties in Catania, 11-14 November 2004.

³⁷ PEBLDS was developed by the Council of Europe and was endorsed by the Ministerial Conference "Environment for Europe" (Sofia, 23-25 October 1995) as a Europe-wide framework for dealing with a number of long-term environmental problems through better coordination of national and international efforts.

³⁸ Programmes based on: (i) Convention for the Protection of the Marine Environment of the North-East Atlantic (adopted in 1992, in force since 1998, supersedes the 1972 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft and the 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources); and (ii) Convention on the Protection of the Marine Environment of the Baltic Sea Area (adopted in 1992, in force since 2000, replaces the 1994 Helsinki Convention).

³⁹ Section 6.1 of OSPAR Quality Status Report (QSR 2000), adopted by the OSPAR Commission in June 2000, analyses the impact of fisheries on ecosystems as well as the effectiveness of regulatory and technical measures applied in the OSPAR geographic area. The concluding paragraph of the Section emphasizes that it is generally recognized that fisheries management and environmental policies must be further integrated within the framework of the ecosystem approach.

UNEP(DEC)/MED WG.264/4 Page 14

fisheries on marine environment, and to seek remedial measures, if necessary, without direct involvement in decision-making about management of fisheries.⁴⁰

On the basis of the above short review of the most relevant contemporary trends and initiatives in the field of marine environment protection the following main trends may be discernible:

- treatment of the marine environment, including fisheries related issues, in a holistic way,
 i.e. as an integral ecosystem, and using a broadly conceived ecosystem-base approach;
- improved policy- and decision-making process through intensified involvement of local authorities and various structures of civil society;
- protection of the marine environment through improved management of activities contributing to environmental degradation, with focus on relevant land-based activities;
 and
- full application of the precautionary principle⁴¹ in designing measures for the protection of the marine environment.

The preambular part of the OSPAR Convention recognizes that questions relating to the management of fisheries are appropriately regulated under international and regional agreements dealing specifically with such questions. Consequently, Annex V of the Convention (Article 4.1) specifies that no programme or measure concerning question relating to the management of fisheries shall be adopted under this Annex. However, where the Commission considers that action is desirable in relation to such aquestion, it shall draw the question to the attention of the authority or international body competent for that question.

⁴¹ In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (Principle 15 of Rio Declaration on Environment and Development, Agenda 21)

PART II

TOWARDS MED POL PHASE IV (2006-2013): PROPOSED APPROACHES

MED POL Phase III is ending in 2005. In view of the recognized role of the Programme and its important contribution to the over all objectives of MAP, the Contracting Parties to the Barcelona Convention decided that the MED POL Programme should continue throughout a new phase (2006-2013) but that it should go through a revision as necessary on the basis of the specific evaluation carried out, the objectives and requirements of the amended Convention and Protocols, the need to substantially contribute to the process of achieving sustainable development, and keeping into account and harmonizing the new Phase IV with ongoing regional and international programmes and initiatives.

There are several steps that should be followed in preparing MED POL IV covering a well structured iterative process needed to develop the next phase of the Programme and ensure its formal adoption by the Parties to the Barcelona Convention.⁴² The stages in this process include:

- the critical analysis of the results of the evaluation of MED POL III in order to benefit from evaluation's findings and recommendations;
- and an agreement on five cluster of issues:
 - (i) the overall objectives and goals of MED POL IV;
 - (ii) the basic principles and assumptions on which MED POL IV should be based;
 - (iii) the scope (content) of MED POL IV;
 - (iv) the modalities of implementation; and
 - (v) the operational details of implementation, including specific goals and targets.

A two-step approval of the next phase by the Parties to the Convention appears to be the most appropriate. The first step includes the approval/adoption of the MED POL IV overall objectives and goals, basic principles, scope (content) and implementation modalities. As the second step, the operational details of implementation modalities (i.e., the "operational document") would then be elaborated on the basis of the agreement on these issues, and submitted for approval to the Parties.

Elements that should be used in considering the first four clusters of issues listed above are elaborated in the ensuing sections of the present chapter, with proposals related to the last (fifth) cluster.

² The short-term road map of the Secretariat includes: (i) presentation of the first draft of the programme description for MED POL IV to selected experts for comments and suggestions (beginning of 2005); (ii) presentation of the amended draft to the Meeting of the MED POL National Coordinators (May 2005); (iii) presentation of the draft principles, objectives, scope and modalities of implementation of the Programme, as agreed by the National Coordinators, to the MAP Focal Points (September 2005) and to Contracting Parties for adoption (November 2005).

Visions

A successful MED POL Programme cannot be seen independently from the context to which it belongs. MED POL is and will remain an integral part of MAP, its Centres and Programmes and the Barcelona legal system, and it operates in a regional and a wider international context with precise roles and expectations. It is therefore obvious that in viewing the MED POL specific long-term reference points, i.e. its visions, the reader should also consider that some of them will be of general nature and involving other actors and stakeholders.

In addition to the overall commonly shared vision for a clean, healthy, biologically diverse and productive Mediterranean marine and coastal environment that both we and our future generations can enjoy, the MED POL Programme's visions include a strong commitment by the Contracting Parties towards the goals of the Convention and the Protocols, and the adoption and the implementation a clear strategy for sustainable development covering a gradual but steady reduction of urban and industrial pollution made through the application of the ecosystem approach to the management of human activities.

Overall objectives and goals

The overall objectives and goals of MED POL III⁴³ may, at this stage, be considered the basic starting point for MED POL IV too, as they correspond to the objectives of the Barcelona Convention and its relevant Protocols and are in line with the principles and objectives of sustainable development. The evaluation carried out confirmed this statement. As a result of the above and considering the necessary evolution of the Programme, the overall objectives of MED POL Phase IV are:

- to contribute to the development of an holistic approach for the monitoring and the assessment of human impacts on the marine and coastal environment, in cooperation with other competent regional bodies;
- to assess all point and diffuse sources and load of pollution reaching the Mediterranean, and the magnitude of the problems caused by the effects of contaminants on living and non-living resources, including human health, as well as on amenities and uses of the marine and coastal regions;
- to assess status and trends in the quality of the marine and coastal environment as an early warning system for potential environmental problems caused by pollution and other anthropogenic pressures;
- to assist countries, including capacity building, for the implementation of national action plans, including programmes and measures, for the gradual elimination of pollution, for the mitigation of impacts caused by pollution and for the restoration of systems already damaged by pollution, as a contribution to the process of achieving sustainable development;
- to monitor the implementation of the action plans, programmes and measures for the control of pollution and assess their effectiveness;

⁴⁹ See the Background chapter of the present document.

 to contribute to the application of the ecosystem approach to the management of human activities within MAP, with MED POL as the monitoring and assessment component.

Basic principles and assumptions

The following are the basic principles and assumptions on which the MED POL could rest:

- a) The entry into force of the LBS and Dumping Protocols and the revitalization of the Hazardous Wastes Protocol as the basic assumptions which would provide all MED POL-related activities with the necessary legal and political strength;
- b) The ecosystem approach to the management of human activities to be adopted by MAP;
- c) MED POL to remain one of the key programme elements of MAP, implemented under the direct authority of the Contracting Parties to the Barcelona Convention, within the legal and policy framework defined by the Convention, the relevant Protocols to the Convention and decisions of the Parties;
- d) MED POL to remain the MAP component responsible for:
 - a. Following up and assisting the countries' implementation of the LBS, Dumping and Hazardous Wastes Protocols:
 - b. Following up and assisting the countries' implementation of the SAP and national action plans;
 - c. Assessing the status and trends of pollution of the Mediterranean eco-regions.
- e) The full and active involvement of all advisory and decision making bodies of MAP as one of the basic requirements for the successful completion of the process leading to the adoption of MED POL IV. However, in order to ensure the broadest possible support and the adequate implementation of MED POL IV, the appropriate non-governmental structures (e.g., the scientific communities, private sector, local authorities, NGOs and other relevant structures of the civil society)⁴⁴ should be

⁴⁴ The somehow non-sufficient dialogue with, and involvement of, the non-governmental structures is probably one of the major shortcomings of MAP and the Barcelona Convention. It is the reason why the Action Plan and the Convention, and the MED POL Programme, are relatively unknown outside a narrow segment of government controlled structures and do not enjoy a broad-based support. The Action Plan adopted in 1995 for the second phase of MAP recognizes that without public support, the application of nature protection and conservation measures cannot achieve results commensurate with the challenges and threats looming over the natural heritage of the Mediterranean, and commits the Contracting Parties to involve local, provincial and regional authorities, as appropriate, in the formulation and implementation of MAP Phase II programme activities, and to associate in the MAP Phase II activities non-governmental organizations involved in the protection of the environment and the promotion of sustainable development, as well as organizations representing economic interests. The Convention, as amended in 1995, commits the Parties to ensure that the opportunity is given to the public to participate in decision-making process relevant to the field of application of the Convention and the Protocols, as appropriate. The SAP also recognizes that information and public participation are essential components of a sustainable development and environmental policy and identifies, as one of SAP's proposed targets, to mobilize and ensure the participation and involvement of the major actors concerned (local and provincial communities, economic and social groups, consumers, etc.).

involved at the onset of phase IV, i.e already during in the dialogue leading to the formulation of the operational details of MED POL IV.

- f) The next phase of MED POL to be built and heavily lean on the results, achievements and experience of the previous phases (especially Phase III). Therefore, the critical analysis of the results, achievements, shortcomings and experience of the Programme carried out by the MED POL Phase III Evaluation, particularly those related directly to the practical aspects of pollution control, should be used in designing the operational details of a realistic and well focused next phase.⁴⁵
- g) In the transitional phase, i.e. until the operational details (the "operational document") for the implementation of MED POL IV are formulated and approved, the basic lines of action approved for MED POL III to be continued but with gradual adaptations, modifications and expansions, as may be required by the scope approved for MED POL IV in harmony with the provisions of the amended Convention and Protocols.
- h) Monitoring to be better integrated into the scope of the SAP and to be used as a tool (i) to contribute to the continuous assessment of the status and trends of the quality of the marine and coastal environment and the effects of pollution and (ii) to assess the effectiveness of the pollution reduction measures implemented by the countries. The scope (content) of the monitoring activities of MED POL to be readapted as appropriate to respond to the above needs.
- i) Monitoring, assessment and pollution control activities, as well as data quality assurance, data collection and handling, reporting and data management policies and procedures to be functionally harmonized with those adopted by regional, international and global bodies and Organizations, such as the European Union and other UN Agencies and programmes.⁴⁶
- j) MED POL assessment and reporting schedules to be synchronised, and the assessment and reporting procedures harmonised, with the schedules and procedures which will be adopted for the evolving global assessment of the state of the marine environment.⁴⁷
- k) Scientific activities related to policy development and implementation that may be supported or initiated by MED POL IV to be directed to the requirements of operational

Last but not least, the Catania Declaration specifies that all concerned partners should be actively involved in the development and implementation of sustainable development policies and activities, in particular the business sector and NGOs, through a participatory approach and operational partnership for joint programmes/projects (operational paragraph 6 pf the Declaration adopted at the meeting of Contracting Parties in Catania, 11-14 November 2003). Aside from reasons given above, the UN-ECE Convention on Access to Information, Public Participation in Decision Making (Aarhus Convention) also requires a full involvement of all stakeholders and general public in processes leading to decision-making.

⁴⁵ An evaluation of MED POL III has been carried out by independent evaluators in 2004-2005 in parallel with the design of MED POL IV.

⁴⁶ As repeatedly recommended by Contracting Parties, all MAP programmes and activities should be as appropriate harmonized with existing regional and international programmes and initiatives so as to facilitate implementation and reporting activities.

⁴⁷ See section on GMA in the previous chapter of the present document.

- monitoring, assessment and pollution control activities and the formulation of pollution control measures, or to identified emerging environmental issues that may need clarifications.⁴⁸
- Public participation and communication to be considered as corner stones for the integration of regional and national civil society and for the achievement of the MED POL objectives;
- m) MED POL to act within MAP as catalyser for the harmonization and integration of the EC Marine Strategy within MAP and for the bridging between the Mediterranean non EU member states and the EC Marine Strategy.

Scope (content)

MED POL IV will retain most of the basic elements of MED POL III, and as such will continue to deal with marine and coastal pollution assessment and control by using the same tools (e.g. monitoring, capacity building, assessments, elaboration of control measures, etc.) that were successfully implemented in the past. However, considering the results of the evaluation of MED POL Phase III, based on the analysis of MAP's legislative framework and the contemporary initiatives and trends in environmental protection, and the recent policy developments at the region and the international levels, it appears that a number of important issues are presently not, or not adequately, covered by the scope of MED POL III and need to be included in its Phase IV.

The list that follows does not pretend to be an exhaustive list of issues that could be considered for inclusion in the new phase of MED POL. Some of the listed issues may be ambitious, controversial or politically objectionable. Nevertheless, even such elements are listed since they are based either on certain provisions of MAP's own legislative framework or are found in the contemporary pollution control initiatives and trends, as explained in the relevant footnotes.

- a) Treatment of the "marine environment" in a holistic way, i.e. as an integral whole consisting of the sea area and the adjacent terrestrial coastal area (as advocated by Agenda 21 and the WSSD, and as implied by the revised title of the Barcelona Convention and envisaged by the amended Article 1 of the Convention ⁴⁹).
- b) Pollution control of river basins, watersheds and ground waters, including their monitoring⁵⁰ (as advocated by WSSD and the European Union, and as envisaged by the relevant articles of the LBS Protocof⁵¹).
- ⁴⁸ MAP recognizes that it should be based on the best possible available science. The scientific foundations of MAP should be ensured by wise use of knowledge and experience generated by the scientific communities and by ensuring that the independent views and impartial advise of these communities is regularly brought to the attention of relevant decision-making structures of MAP.
- ⁴⁹ The title of the Convention: Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean. Article 1, paragraph 2 of the Convention: The application of the Convention may be extended to coastal areas as defined by each Contracting Party.
- The translation of the provisions quoted in the next footnote into operational details of MED POL will probably pose major difficulties and will require careful considerations. The experience gained through GIWA (described in section on *Contemporary initiatives*) may be used as useful guidance. Initially it may be reasonable to cover only the estuaries, particularly if they are declared also as hot spots, and move gradually upstream only when

c) Application of the ecosystem approach to the management of human activities⁵², including pollution controf⁵³ (as advocated by a large segment of scientific community, proposed by SAP⁵⁴ and the European Union, advocated by the MED POL Phase III

the available data show the existence of pollution hot spots upstream. Tackling the management of ground waters would be the most demanding task and probably should be attempted only gradually.

- Article 3, paragraph (b) of the Protocol: The area to which Protocol applies shall be the hydrological basin of the Mediterranean Sea. Article 4, paragraph 1(a) of the Protocol: The Protocol shall apply to discharges from LBS point and diffuse sources and activities within the territories of the Contracting Parties that may affect directly or indirectly the Mediterranean Sea area. These discharges shall include those which reach the Mediterranean Area, as defined in Article 3(a), (c) and (d) of this Protocol, through coastal disposal, rivers, outfalls, canals, or other watercourses, including ground water flow, or through run-off and disposal under the seabed with access from land. Article 8 of the Protocol specifies that the Parties shall carry out at the earliest possible date monitoring activities, presumably covering the Protocol area, i.e. the hydrological basin of the Mediterranean.
- ²² The Mediterranean Sea is certainly a distinct ecosystem and the ecosystem-based approach to its protection may be considered – when compared with sectoral approach focusing on the protection of species, habitats, biodiversity, or elimination of specific pollutants - an attractive and viable, though demanding option. The overarching argument in favour of the ecosystem-based approach is that only by maintaining the functional and structural integrity of the ecosystem can the protection of its individual components be achieved. However, it should be admitted that, for the time being, there is neither a universally adopted definition for the concept of the ecosystem-based approach to environmental protection, nor a common methodology for its application. In essence, the approach consists in integration of sometimes conflicting demands in protecting and exploiting the marine environment in such a way that it can continue to support these demands in the long-term. Tentatively the approach could be also described as the comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamic, in order to identify and take action on influences which are critical to the health of marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem's integrity. In formulating its marine strategy, the European Commission has made substantial efforts to prepare a road map for the application of the ecosystem approach in Europe. MAP should make use of the progress made and the experience gained for the application of the ecosystem approach in the Mediterranean.
- This would require the formulation and adoption of additional Mediterranean-wide environmental quality objectives (EQO) and standards (EQS) for different "uses" of the sea as primary "yardsticks" to determine locally applicable effluent standards and input limits. The adoption of specific Mediterranean EQOs and EQSs may have to be carefully harmonized with the approach of the European Commission and Union. Namely, some standards and objectives may be equally good for Atlantic and the Mediterranean waters but others would have to take into account the specific ways and conditions under which these waters are used. For instance, adoption of identical microbiological criteria for Mediterranean and Atlantic bathing waters would not be appropriate.

⁵⁴ One of the targets proposed in the SAP is to safeguard the ecosystem function, maintain the integrity and biological diversity of species and habitats.

evaluation and adopted by a number of regional pollution control programmes⁵⁵). For its application, the Mediterranean is proposed to be initially divided into four management regions (Western Mediterranean, Central Mediterranean (Ionian Sea), Adriatic Sea, Aegean-Levantine Sea).

- d) Plans and programmes to counter physical alteration and destruction of habitats in cooperation with the competent regional bodies (as advocated by Agenda 21, SAP, GPA/LBA, PEBLDS, and identified by numerous assessments as among the most serious problems of the marine and coastal environment⁶).
- e) Intensified collaboration with natural and social scientists, and better use of scientific understanding of marine and coastal ecosystems as a functional basis for sound decision-making⁵⁷ (identified by the WSSD, and many others, as a common problem).
- f) Inclusion of the analysis of relevant social and economic factors into the assessment of the state of the marine environment (as recommended by WSSD, carried out by GIWA, and envisaged by GMA).
- g) Meaningful involvement of, and collaboration, with the private sector⁵⁹ in designing and implementation of pollution control programmes and in the evaluation of their results (identified by WSSD as a common problem).
- h) Consideration of the environmental effects and ecological implications of fisheries management, including aquaculture, on ecosystems (as advocated by the ecosystem

⁵⁵ For instance: HELCOM and OSPAR.

⁵⁶ For instance: GESAMP, GEO.

⁵⁷ MAP and MED POL would certainly benefit from an intensified mobilization of the scientific community and from the impartial advice such community could provide. Surprisingly, SAP does not mention the need for support of science in its implementation nor does it identify the existing gaps in science as a problem hampering environmental protection.

⁵⁸ The consideration of social and economic aspects connected with environmental protection, i.e. the analysis of the social and economic roots of environmental degradation is hitherto largely neglected. Consequently, most of the adopted and recommended pollution control measures are technology-based which makes a number of well-intended pollution control recommendations, decisions, targets and measures impractical and intractable.

⁵⁹ In most Mediterranean countries the economic activities of private sector are a major source of environmental degradation. Nevertheless, the private sector should not be treated as an adversary but should be mobilized as a potential partner of MAP and the hitherto mostly "repressive" measures designed to ensure the private sector's compliance with national environmental protection policies should be replaced with measures and policies stimulating the sector's voluntary promotion of MAP's goals.

⁶⁰ The serious negative effects of current policies and practices used in fisheries and aquaculture on marine ecosystems and, by implication, on economic activities associated with fisheries and aquaculture, are today well documented and quite well understood at all levels. They are recognized as the major threat undermining the viability of these industries and are the cause of serious disturbances in the ecosystems. The remedy universally recommended by both scientists and enlightened managers is to apply the ecosystem-based management to fisheries and aquaculture. Some regional seas have already moved towards this goal: a recently adopted report of OSPAR emphasizes that *it is generally recognized that*

approach to the management of human activities and practised by other Europe-based regional seas programmes).

- i) Tightened control over ecological and health-related impact of dumping 61.
- j) A wider use of preventive actions in pollution control, especially by preparation of environmental impact assessments for planned activities that may be a major source of marine pollution (as envisaged by the LBS and Dumping Protocols, and the SAP⁶²).
- k) Monitoring of environmental effects associated with energy production and maritime transport, in cooperation with other competent regional bodies.
- l) Assessment of the health risk associated with the quality of bathing and shellfish-growing waters, ⁶³ tourist establishment and facilities. ⁶⁴

fisheries management must be further integrated within the framework of the ecosystem approach. (OSPAR Quality Status Report 2000, Section 6.1) For further discussion of this topic see document FAO/UNEP: Ecosystem-based Management of Fisheries. UNEP Regional Seas Reports and Studies No.175. UNEP 2001.

⁶¹ The provisions of the Dumping Protocol do not at present provide adequate protection for ecosystems from pollution. Among the *factors to be considered in establishing criteria governing the issue of permits for dumping*, the Annex to the Protocol includes only *biological productivity* and envisages that *when issuing a permit for dumping, the Contracting Parties shall endeavour to determine whether an adequate scientific basis exist for assessing the consequences of such dumping.* In practice, such vague and imprecise formulations often lead to indiscriminate dumping without any serious consideration for the ecosystem that may be affected. Treating dumpsites in a much stricter way, as envisaged by the LBS Protocol for the treatment of discharge sites of coastal points sources of pollutants, including the preparation of formal environmental impact assessments and follow-up monitoring programmes in the case of major or protracted dumping on the same site, would seem more appropriate.

[©] According to the Principles and Obligations adopted under the SAP, the Parties to the Barcelona Convention shall *undertake environmental impact assessment for proposed activities that are likely to cause a significant adverse impact on the marine environment and are subject to an authorization by competent national authorities.* This principle and obligation would seem to be applicable to all authorizations issued under the Dumping and the LBS Protocols.

⁶³ A recent WHO-supported study concluded that *contaminated seafoodr* and bathing waters are significant contributors to the human "global disease burden", measured as losses associated with premature death and with the length and severity of disabilities. The associated economic losses are estimated to be among the major ones attributable to any specific diseases (GESAMP: Protection of the Oceans from Land-Based Activities. GESAMP Reports and Studies No.71, UNEP, 2001.). No reliable data from the Mediterranean region are available to corroborate these conclusions because the assessment of health risk associated with contaminated bathing waters and seafood is mainly based on anecdotal "evidence" and is probably grossly underestimated. In such circumstances, the environmental quality criteria adopted for Mediterranean bathing waters are now being updated in harmony with the similar work being carried out by other international bodies and in particular the European Commission.

⁶⁴ Contaminated bathing waters and seafood are not the only sources of potential health risk for millions of tourists and local inhabitants using the Mediterranean coastal environment for

- m) Intensified dissemination of information on the problems associated with the Mediterranean; mobilisation of public support to the goals of MAP/MED POL; preparation and wide distribution of regular "state of the Mediterranean" reports addressed to general public⁶⁵, by making effective use of information technology (IT).
- n) The assessment and, if appropriate, the gradual application of the differentiated approach in the process of reducing pollution, as recommended by the evaluation carried out, to facilitate the long-term implementation of the SAP.
- o) Intensified and well structured programmes that may facilitate transfer of technology between countries in order to reduce the existing technological gaps in the pollution reduction processes.

Some of the above issues may appear as beyond the scope of a programme initially designed for marine pollution control. However, while sectoral and narrowly defined control of marine pollution may have been seen in 1975 as an effective remedy to the woes of the Mediterranean basin, the changes adopted since 1995 in MAP's legislative framework are a clear indication that the Parties to the Convention have shifted the focus of their attention from the protection of the Mediterranean Sea against pollution to a broader and more ambitious goal: to the protection of the marine environment and the coastal region of the Mediterranean. Agenda 21, the contemporary global and regional initiatives and trends in the approach to environmental protection, and the change in the philosophy underpinning the current legislative framework of MAP, indicate that the time may be appropriate to make certain adjustment, even if ambitious, in the present scope of MED POL.

Modalities of implementation

recreational purposes. The sanitary quality of coastal recreational establishments and facilities (e.g., hotels, camps, restaurants, marinas, beaches) is of equal, if not of higher importance. Therefore, the monitoring of the quality of these establishments and facilities would seem at least as important as monitoring land-based activities which may have an impact on marine environment and carry a considerable concomitant health risk.

⁶⁵ The numerous and generally high quality technical documents emanating from MED POL, or the information on the quality and problems of the Mediterranean environment contained in various MAP publications and information diffusion systems (e.g., MAP's web-site, press releases), have a very limited impact on general lay public which is not directly associated with the usual circle of government officials dealing with MAP. The form, content and language of these documents and information materials are far from meeting the requirements of modern information technologies and therefore they generally fail to capture the imagination of wider public or raise its interest in and awareness about the environmental problems of the Mediterranean. In many instances support of general public for some of MED POL goals may be worth more than uninspiring decisions of questionable viability. Wellconceived and "eye-catching" publicity campaigns, closer association with the work of nongovernmental organisations, cultivation of media representatives and "feeding" them with interesting news about "things that matter", providing an interactive public forum on MAP's website for expression of views and opinions about controversial subjects, publication of short state of the Mediterranean reports written in non-technical language, are only some of the methods that could be considered.

⁶⁶ Comparison of the original (1976) title of the Barcelona Convention with the revised text of the Convention (1995).

In order to ensure a smooth transition to the next phase of MED POL, and assuming that the activities of MED POL IV will be organically linked to those of the present phase of MED POL, it would be important that the eventual changes in the current modalities of implementation be introduced only gradually, taking into account the results of the evaluation of MED POL III⁶⁷, the evolution of MAP and the objectives, goals and scope approved for MED POL IV.

The basic functions and responsibilities of the National MED POL Coordinators, the National MED POL Collaborating Institutions and the Secretariat as agreed for the implementation of MED POL III⁶⁸ should be retained, albeit some of their functions and responsibilities may need to be slightly redefined. In addition, considering in particular the multidisciplinary aspects of the pollution reduction process, the need to involve other national stakeholders (e.g. Ministries of finance, of public works, etc.) in addition to the Ministries of Environment seems to become necessary if MED POL wants to achieve concrete results. To that end, the establishment of a mechanism in each country to ensure appropriate coordination and integration in their national programmes of the MED POL activities, and in particular those of the SAP, is recommended.

It should be kept in mind that each Mediterranean country has a national pollution control programme and the implementation of MED POL (including SAP) at national level can be successful only if it is implemented in the framework and as part of this wider national programme carried out through national mechanisms which differ considerably from country to country. Therefore, while retaining the central technical responsibility of the National MED POL Coordinators for the implementation of MED POL at national level, the full integration of national MED POL activities (including SAP) in the national pollution control programmes should be added to their responsibilities. As a minimum requirement, the MED POL National Coordinator should include in his/her functions the follow up of the implementation of the SAP as well.

Under the guidance and supervision of the relevant structures established under the MAP and the Barcelona Convention, the Secretariat should continue playing a central coordinating role for MED POL, ensuring the harmonisation of national activities at the Mediterranean level, and effectively and meaningfully monitoring their implementation. ⁶⁹ In the preparation of "guidance documents" for the implementation of MED POL (e.g., various technical and policy documents, guidelines), all efforts should be made to take into account the work already carried out by other regional and international bodies and special but critical attention should be paid to their harmonization with other relevant documents developed at the

⁶⁷ The evaluation of MED POL III has been carried out by independent evaluators during 2004-2005.

[®] MED POL Phase III: Programme for the Assessment and Control of Pollution in the Mediterranean Region. Chapter 4. MAP Technical Reports Series No.120. UNEP, Athens, 1999.

[©] The present monitoring of MED POL's implementation is exclusively based on national reports which are still not always satisfactory. Although large efforts are made by MED POL and MAP in general to improve the reporting system, different forms of control could be proposed, evaluated and organized jointly by the Secretariat and the relevant National Coordinators, and carried out e.g. by independent experts appointed by the Secretariat, as practiced by the "Blue Flag Programme" (see more about this Programme in footnote no. 75).

regional and international levels by the European Commission and Union and other international agreements. $^{\pi}$

Some of the Secretariat's functions and responsibilities could be assumed by or shared with the National Coordinators or Collaborating Institutions (e.g., organisation of training and capacity building activities, or preparation of technical meetings, documents and guidelines). This would lighten the burden of workload on the Secretariat staff and could become a source of considerable in -kind contribution to the budget of MED POL.⁷¹ It would also seem advantageous to intensify a more meaningful involvement of the Collaborating Institutions in shaping and management of MED POL.⁷²

In considering the implementation modalities for MED POL IV, it would seem appropriate to examine also the ways and means to further strengthen cooperation with the relevant international and intergovernmental organisations, global conventions⁷³ and programmes and, in particular, the support that may be obtained from national structures hitherto not formally associated with MED POL. In addition, there may be room for intensified

⁷⁰ As an example, the Directives promulgated in the framework of the European Union are binding for the member states of the Union and therefore the standards or criteria used in these Directives could be considered as the minimal standards or criteria applicable to the Parties of the Barcelona Convention. However, there will be instances when, in the context of MAP, more stringent standards and criteria would have to be applied in order to safeguard the Mediterranean environment or the health of people. For instance, the proposal for a *Directive concerning the Quality of Bathing Waters* (COM(2002) 581) envisages uniform criteria (parameters) against which the quality of bathing waters is classified in all member countries of the Union using an estimated health risk of questionable relevance for the bathing habits around the Mediterranean. Moreover, anybody familiar with the way bathing is practiced in the warm Mediterranean waters and the much cooler waters of the Atlantic can easily conclude that the health risk for bathing in waters of the same quality is much higher in the Mediterranean. Consequently, in order to provide for the same, Union-wide degree of protection, the classification of Mediterranean bathing waters most probably requires stricter criteria than those specified as common criteria advocated by the Directive.

⁷¹ This approach is widely and successfully practiced by a large number of programmes (e.g., OSPAR, HELCOM, a number of programmes run by IOC).

It may be worth recalling that MED POL was initially designed and enthusiastically supported by Mediterranean scientific community and their institutions. Unfortunately, their role in shaping and influencing the management of MED POL was gradually eroded and they largely lost the feeling for MED POL as "their" programme. This led to a considerable loss of interest of Collaborating Institutions in MED POL. As a corollary, it became a prevalent opinion, particularly virulent in some less developed countries and their institutions, that national contributions (e.g., monitoring and research data, implementation of pollution control measures) to the implementation of MED POL (including the relevant Protocols and SAP) ought to be paid from funds at the disposal of MED POL or mobilized through MAP, either directly or indirectly (e.g., as equipment or training). While theoretically it is appreciated that national contributions to MED POL are not voluntary but are an obligation of the Contracting Parties, without a more active support of MED POL by the Collaborating Institutions the reporting system to MED POL will remain a chronic problem.

⁷³ Harmonisation of the reporting requirements (contents, schedules, procedures) to the maximum possible extent would be highly beneficial as it would allow the countries to prepare a single report that could be used both in the context of MED POL and the relevant global conventions to which the countries are parties.

cooperation with some sectors of national e conomy, local authorities and non-governmental organisations, using innovative approaches. The tourism-based economic sector would seem a particularly appropriate partner⁷⁴, although the establishment of a closer partnership with other sectors would be also worth examining.⁵⁵

Public awareness and opinion is among powerful forces determining the success of any programme. Therefore, it would be advisable for MED POL to maintain a closer link with NGOs and media representatives and to provide them regularly with information that they could use in promoting the goals of MED POL.⁷⁶

Sustainable implementation of MED POL

It would not be appropriate to elaborate at this stage the operational details of MED POL IV without a prior clear decision of the Parties to the Convention on the basic principles, overall objectives and goals, scope (content) and implementation modalities which should be the basis for these operational details. Therefore no attempt is made to cover this subject in the

⁷⁴ Tourism critically depends on the high quality of the environment and yet the tourist establishments and facilities (i.e., hotels, camps, marinas, beaches) are, at the same time, a major contributors to the physical and ecological degradation of the coastline and to the pollution of coastal waters. Therefore, the tourism sector is keen to maintain its "clean" environmental image and is very sensitive to criticism of its environmental record. This provides a first rate opportunity for a constructive and mutually beneficial cooperation between MAP and the tourism sector. For instance, against a modest fee MAP could recognise ("certify") beaches that meet health-related safety standards by some visible sign of recognition which would, at the same time, promote the image of MAP as guardian of Mediterranean. As indicated by the very successful and well organised "Blue Flag Programme", run on a semi-commercial basis by a non-governmental organisation (Foundation for Environmental Education – FEE, www.blueflag.org), which covers more than a thousand Mediterranean beaches, the tourism sector is keen to participate in appropriate "eco-labelling" exercises. Unfortunately, while there is no visitor to the shores of the Mediterranean who is not familiar with the "Blue Flag", at present virtually nobody is associating the care for the Mediterranean with the name of MAP, Barcelona Convention or UNEP.

For instance, various industries and coastal local authorities proudly advertise and emphasise that they meet ISO and EU environmental standards, but only a few of them, if any, is aware that they are expected to meet also the standards, criteria or measures promoted or prescribed in the framework of the Barcelona Convention. Most probably they would also show an interest in MAP-sponsored eco-labelling or in some sort of recognition awarded by the Parties to the Convention annually (at the Environment Day or at some other suitable event) to the "environment friendly" industries and communities. Competition among coastal local authorities for this sort of awards is very keen as it is among the most effective ways to promote and attract tourism. UN's *Global Comp act* initiative launched four years ago by the Secretary General could serve as a good model for an improved dialogue with business communities, although most NGOs view the initiative with suspicion, considering it as "bluewashing" of the sullied corporate reputations with the UN's hitherto untainted brand. Protection of the environment is one of the nine core principles of the *Compact*.

[™]The contents and style of available information relevant to MED POL is still not too suitable for the needs of media and, therefore, is only rarely finding its way to a wider audience or readership.

present document with the exception of a few general remarks and some considerations towards a sustainable implementation of the Programme.

As a follow up to the evaluation of MED POL Phase III, and in order to ensure effectiveness to the Programme, in setting the specific objectives, goals and targets for MED POL IV, their feasibility should be carefully examined through the widest possible consultation with key stakeholders, taking into account the social and economic implications of the planned actions, including their cost-benefit ratio 77,78.

The financial constraints related to capital investments and their sustainable maintenance are objectively among the major obstacles for the implementation of MED POL (in particular SAP) and should be taken into account when the specific goals and targets will be set as part of operational details for MED POL IV (i.e., in the operational document of MED POL IV).

The Parties to the Convention should face the fact that the costs associated with the implementation of MED POL (including SAP) should be primarily met from their own resources. A variety of instruments are at the disposal of the Parties for the mobilisation of these resources. The instruments differ from country to country and the experience with their application is currently being examined in the framework of SAP. In addition to the resources mobilised at national level, supplementary support for the implementation of MED POL is available, although modest, through the Mediterranean Trust Fund of MAP and, to some eligible countries, through bilaterally or multilaterally funded projects and donations.

⁷⁷ The Aarhus Convention explicitly requests that all stakeholders in a programmes, including general public, should have easy access to information relevant to the programme and should be included in the decision-making process. Presently it is becoming a widely-practiced approach followed at global and national levels. For instance, a series of consultations involving - in addition to the member states - independent scientific experts, stakeholders, non-governmental organizations and the wider public have been held during the preparation of the *Directive of the European Parliament and of the Council covering the Quality of Bathing Waters*, and when approving the development of the proposal for the *Directive* the Council specifically requested the Commission that *cost-benefit considerations* should be taken into account (for more details see the *Explanatory Memorandum* of the *Directive* – COM(2002)581).

⁷⁸ The cost-benefit analysis (CBA) of any planned action is today considered as the best available technique to help policy-makers establish priorities and orient investment decisions. The CBA easily identifies losers and beneficiaries and so allows to address the resulting issues of equity promptly. However the use of CBA is not without some problems. Probably the most controversial part of the CBA is the selection of a discount rate that will properly account for transfers between generations. The other major problem is the placing a monetary value on the functions of ecological systems which leads, perhaps more often than not, to under-valuation of the services provided by an ecosystem. (For an extensive treatment of CBA, and the economic valuation of coastal and marine systems see An nex 1 in *GESAMP: Protecting the Oceans from Land-Based Activities*. GESAMP Rep. Stud. No 71, 2001).

The results of these examinations can be found in a number of studies carried out by the Priority Actions Programme Regional Activity Centre (PAP/RAC) of UNEP/MAP. (For these studies and other related documents see PAP/RAC's web page: www:pap-sapei.org).

⁸⁰ The most important sources of supplementary funding include the Global Environment Facility (GEF), the World Bank, the programmes of the European Union (the Euro Mediterranean Partnership in particular), the United Nations Development Programme (UNDP) and a number of national cooperation funds such as the Fond français pour

UNEP(DEC)/MED WG.264/4 Page 28

In this context, the MED POL Secretariat will play an important catalytic role in the mobilization of such funds by bridging countries and projects with donors and other stakeholders.

The protection of the Mediterranean is today of common interest not only to its coastal states but also to citizens of other countries which in their millions enjoy visiting and benefiting from the Mediterranean environment. This wider interest in maintaining a healthy and clean Mediterranean environment may finally be used to consider the establishment of a "Mediterranean Fund" along the lines of *The Global Fund* and use its resources to make substantial and significant contribution to the present woes of the Mediterranean basin.

l'environnement mondial (FFEM). There are specific country eligibility clauses associated with some of these funding sources.

⁸¹ The Global Fund is an independent public-private partnership and the largest global fund in the health domain, with US\$ 5.4 billion currently committed from governments and private donors worldwide to mitigate the impact caused by HIV/AIDS, tuberculosis and malaria. (For more details about the Fund see www.theglobalfund.org).

ANNEX

ACRONYMS AND ABBREVIATIONS

Aarhus Convention – UN-ECE Convention on Access to Information, Public Participation in Decision Making

Agenda 21 – Programme of Action for Sustainable Development (adopted at UNCED)

BAP – best available practice

Barcelona Convention – Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean

BAT – best available technique / technology

BEP – best environmental practice

CAMP – Coastal Areas Management Programme (of MAP)

CBA – Cost-benefit analysis

CFP – Common Fisheries Policy (of the European Union)

Dumping Protocol – Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea

EQC - Environmental Quality Criteria

EQO – Environmental Quality Objectives

EQS – Environmental Quality Standards

EU - European Union

FAO – Food and Agriculture Organization of the United Nations

GDP – gross domestic product

GEF – Global Environment Facility

GEO – Global Environment Outlook

GESAMP – Joint Group of Experts on the Scientific Aspects of Marine Environment Protection (IMO/FAO/UNESCO-IOC/WMO/WHO/IAEA/UN/UNEP)

GIPME – Global Investigation of Marine Pollution (IOC)

GIWA – Global International Water Assessment

GMA – Global Assessment of the State of the Marine Environment / Global Marine Assessment

GOOS – Global Ocean Observing System (IOC/WMO/UNEP)

GPA/LBA – Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities

Hazardous Wastes Protocol – Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal

HELCOM – Baltic Marine Environment Protection Commission

IAEA – International Atomic Energy Agency

ICAM – integrated coastal area management (synonymous with ICZM – integrated coastal zone management)

IGBP – International Geosphere -Biosphere Programme

IMO – International Maritime Organization

INFOTERRA – International Environment Information System (UNEP)

IOC – Intergovernmental Oceanographic Commission of UNESCO

IPCC – Intergovernmental Panel on Climate Change

IUCN – World Conservation Union (formerly: International Union for Conservation of Nature and Natural Resources)

LBS Protocol - Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities

Page 30

MAP - Mediterranean Action Plan

MED POL – Programme for the Assessment and Control of Pollution in the Mediterranean Region

NAP – National Action Plan**NGO** – non-governmental organization

OSPAR – Oslo and Paris Commission

PAP/RAC – Priority Actions Programme Regional Activity Centre (of UNEP/MAP)

PEBLDS – Pan-European Biological and Landscape Diversity Strategy (of the Council of Europe)

POPs – persistent organic pollutants

REMPEC – Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea

Rio Declaration – Rio Declaration on Environment and Development (adopted at UNCED) **SAP** – Strategic Action Programme to Address Pollution from Land-Based Activities (in the Mediterranean Sea)

UNCED – United Nations Conference on Environment and Development (Rio de Janeiro, 3-14 June 1992)

UNDP – United Nations Development Programme

UNCHE – United Nations Conference on Human Environment (Stockholm, 5 - 16 June 1972)

UNCLOS - United Nartions Convention on the Law of the Sea

UNDP – United Nations Development Programme

UNEP – United Nations Environment Programme

UNESCO – United Nations Educational, Scientific and Cultural Organization

UNIDO – United Nations Industrial Development Organization

WFD – Water Framework Directive (of the European Commission)

WHO - World Health Organization

WMO – World Meteorological Organization

World Bank - International Bank for Reconstruction and Development

WSSD – World Summit on Sustainable Development (Johannesburg, 26 August – 4 September 2002)

WTO - World Tourism Organisation

WWF - World Wide Fund for Nature (formerly: World Wildlife Fund)