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DRAFT

THE MEDITERRANEAN ACTION PLAN

Regional co-operation for the protection and enhancement of the marine environment in the Mediterranean Sea Area

A contribution to the preparatory process
of the 1992 United Nations Conference
on Environment and Development

U N E P
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Abstract

International Co-operation for the protection of the Mediterranean Sea against pollution started in 1975 under UNEP's auspices with the adoption of a programme entitled the **Mediterranean Action Plan**.

All eighteen coastal states and the EEC participate in the programme as Contracting Parties to the Barcelona Convention and its related protocols. This is a concrete example of co-operation between industrialized and developing countries from Europe, Africa and Western Asia with significant achievements to its credit in monitoring and combating marine pollution and coastal degradation. The experience gained is presented as a contribution to the preparatory process for the 1992 UN Conference on Environment and Development.

Introduction

The decision of the General Assembly to convene in 1992 a United Nations Conference on Environment and Development (GA 44/228) with a preparatory process based on national reports and regional conferences, was brought to the attention of the Sixth Ordinary Meeting of the Contracting Parties to the Convention for the protection of the Mediterranean Sea against pollution (the Barcelona Convention) and its related protocols held in Athens from 3 to 6 October 1989[1]. The meeting decided that the Secretariat, including its Regional Activity Centres, should prepare for the Conference a synthetic report based on data and policy reports supplied by governments (UNEP(OCA)/MED IG 1/5).

The joint meeting of the Scientific and Technical Committee and the Socio-Economic Committee of the Contracting Parties, held in Athens from 28 May to 1 June 1990 recommended that the report should take into account the decisions of the Preparatory Committee for the 1992 Conference (Nairobi, 6-31 August 1990) and that the Bureau of the Contracting Parties might consider authorizing the holding of a specific meeting to assist in the preparation of the report (UNEP(OCA)/MED WG.12/6).

The Bureau of the Contracting Parties, meeting in Rome in September 1990, took note of the work of the Preparatory Committee for UNCED at its first session (Nairobi, 6-31 August 1990) and, in particular, of the Committee's request to review, at its second session "a comprehensive report with recommendations for actions" covering the following areas:

- Measures to strengthen regional, subregional and inter-regional co-operation programmes, including the Regional Seas Programme of the United Nations Environment Programme, which have proved effective and viable mechanisms for dealing, inter alia, with pollution-related problems;

- Effectiveness of national, regional and international efforts to deal with marine pollution from all sources and of measures in support of those efforts, including:

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1. The list of Contracting Parties is as follows: Albania, Algeria, Cyprus, EEC, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Spain, Syria, Tunisia, Turkey, Yugoslavia.

(i) Development of national port infrastructure for the collection and disposal of wastes;

(ii) Measures to strengthen or establish facilities for waste and used-water treatment;

- The effectiveness and status of existing legal instruments and the identification within appropriate forums of gaps in existing mechanisms for the protection, rational use and development of living marine resources;

The Bureau approved a timetable for the preparation of the report for UNCED, including a meeting of government-nominated experts to adopt the final version of the report (document UNEP/BUR/37/6).

The present document was reviewed and adopted at a meeting of government experts convened in Athens from 16 to 18 January 1991 (UNEP(OCA)/MED WG. 19/4).

Background

International co-operation for the protection of the Mediterranean Sea against pollution started in 1975 at the initiative of the United Nations Environment Programme (UNEP) under the name of **Mediterranean Action Plan**. The eighteen coastal States that participate in it, along with the European Economic Community, belong to different regions and are at varying levels of economic and social development. Yet, by working together, they have been able to accomplish a number of major steps leading to the combating of pollution and appropriate management of coastal areas, namely, they undertook **legal commitments**, prepared **assessments of pollution**, adopted **common measures**, and established an **institutional framework**. As these steps will have to be completed in every programme for the protection of enclosed and semi-enclosed seas, the experience of the Mediterranean States in facing and solving such common problems may be taken as a significant input to the preparatory process of the 1992 UNCED.

Legal Commitments

The **Barcelona Convention for the protection of the Mediterranean Sea against pollution**, the **Protocol for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft** and the **Protocol concerning co-operation in combating pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency** were adopted in 1976 and have since been ratified by all 18 Mediterranean coastal States and by the EEC. The **Protocol for the protection of the Mediterranean Sea against pollution from land-based**

sources was adopted in 1980 and has since been ratified by 15 Mediterranean States and by the EEC. The **Protocol concerning Mediterranean Specially Protected Areas** was adopted in 1982 and has since been ratified by 16 Mediterranean States and by the EEC. A draft **Protocol for the protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf and the sea-bed and its subsoil** is being negotiated and is expected to be adopted by a Conference of Plenipotentiaries in 1991.

Actions that are pending in the legal field include the formulation and adoption of appropriate procedures for the determination of liability and compensation for damage resulting from the pollution of the marine environment deriving from violations of the provisions of the Convention and Protocols (as called for by Article 12 of the Convetion) and the adoption of the Arbitration procedure for the settlement of disputes, referred to in Article 22 of the Convention.

Institutional framework

The Contracting Parties to the Barcelona Convention expressed their commitment to its goals by setting up a permanent institutional framework consisting of the following elements:

- Biennial meetings of Contracting Parties, with ministerial participation;
- a Bureau of four elected Parties meeting every six months;
- UNEP designated as the secretariat with a full-time Co-ordinating Unit established in Athens;
- Regional Activity Centres set up in Malta, Split (Yugoslavia), Sophia Antipolis (France), Salammbo (Tunisia);
- A Mediterranean Trust Fund to which they contributed so far US$ 35 million with additional firm pledges of $6.6 million until the end of 1991.

Assessment of pollution

Governments require reliable information on the state of pollution of the coastal waters and of the open sea, as well as on the sources of pollution and quantities of pollutants reaching the area, with an indication of the damage they cause.

A Mediterranean co-ordinated pollution monitoring and research programme (MED POL) was launched as part of the Mediterranean Action Plan in 1975. At present more than 100 marine research laboratories participate in it under the joint scientific supervision of UNEP, WHO, FAO, UNESCO/IOC, WMO and IAEA.

The coastal States have progressively adopted common parameters for monitoring, analytical and sampling techniques and data reporting formats. They have also established programmes for training, provision of laboratory equipment and supplies. In addition, a comprehensive data quality assurance programme was launched in order to enable all the countries to participate in MED POL and submit reliable data.

On the basis of the data supplied, the secretariat was able to prepare assessment documents on the state of pollution by mercury, cadmium, petroleum hydrocarbons, organohalogen and organotin compounds, used lubricating oils, as well as of microbial pollution of bathing and shellfish growing areas and proposed measures to combat such pollution.

Assessment of pollution is a continuing process required to keep the situation under review in order to record improvements and to identify and circumscribe areas (hot spots) requiring stronger action.

At the same time, assessment is being constantly improved through better monitoring instruments and monitoring strategies, that allow the necessary information to be collected with a reduced monitoring effort.

International co-operation and exchange should concentrate on the formulation of appropriate monitoring strategies and the upgrading of analytical capabilities.

A comprehensive report on the state of the Mediterranean marine environment is distributed to the Contracting Parties at approximately five-year intervals. The most recent such document was published in 1989 (MAP Technical Report Series No. 28). Findings of this document as well as of the assessment documents mentioned above can be summarized as follows:

- The Mediterranean Sea, as a semi-enclosed water body with a permanent coastal population of about 130 million and more than 100 million tourists annually, serves, at a steadily growing pace, as the recipient of a multitude of waste discharges from residential areas, touristic complexes and industrial activities;

- as in other regions, the main human health problems associated with marine pollution in the Mediterranean arise from contact with polluted water and/or sand in bathing beaches and consumption of chemically or microbiologically contaminated seafood. In the case of microbiological contamination of bathing beaches and shellfish, the situation has improved during the last decade, as a result of a stricter enforcement of standards for the quality of water and marine organisms, coupled with measures to reduce sewage pollution at source;

- adverse health effects through consumption of chemically contaminated seafood appear to be restricted to relatively heavy seafood consumers, but the range and level of such effects has still to be determined;

- the industrial sources and the natural geochemical anomalies in certain Mediterranean localities influence the level of mercury in organisms and marine sediments adjacent to these sources. The high mercury levels found in certain Mediterranean seafood species represent a legal and, possibly, a health problem in addition to any effect these levels may have on marine organisms and ecosystems;

- the levels of cadmium reported for the various compartments of the Mediteranean marine environment are not alarming and, in general, are comparable to those found in other regions of the world. In general, cadmium in seafood constitutes only a small fraction of the total daily intake, and terrestrial food and smoking are much more important;

- information on levels of organochlorine compounds in the Mediterranean Sea area indicates the increased risk of cancer for population with high consumption of sea food;

- the concentration of petroleum hydrocarbons in sea water, sediments and organisms vary over a wide range. Measurements of pelagic and beach tar conducted after 1980 suggest a decrease in tar quantity within the last ten years, especially in the eastern Mediterranean;

- generally the Mediterranean waters are oligotrophic and eutrophication is mostly associated with embayments, large coastal cities and estuaries due to release of untreated domestic/industrial waste water. Eutrophication is frequent in some localities and the main symptoms consist in the disruption of the community structure, the excessive algal production and the development of anoxicity in the subsurface layer. The open-sea oligotrophic Mediterranean waters, however, remain in sharp contrast with the conditions prevailing in its peripheral embayments.

Common measures adopted

Measures that can be taken to combat marine pollution range from outright prohibition of discharges, to emission standards, environmental quality criteria or other actions of a technical or educational nature. The Mediterranean States have adopted a wide range of measures from each of these categories. Each measure was adopted unanimously. They apply to the entire basin in order to avoid distortions in the economic sector that would result if different levels of protection were adopted by different countries or groups of countries.

The measures already adopted are listed below. The full text of each decision appears in the MAP Technical Report Series No. 38 that is available to delegations together with the present text:

1. Interim Environmental Quality Criteria for Bathing Waters (1985);

2. Interim Environmental Quality Criteria for Mercury (1985);

3. Measures to Prevent Mercury Pollution (1987);

4. Environmental Quality Criteria for Shellfish Waters (1987);

5. Measures for Control of Pollution by Used Lubricating Oils (1989);

6. Measures for Control of Pollution by Cadmium and Cadmium Compounds (1989);

7. Measures for Control of Pollution by Organotin Compounds (1989);

8. Measures for Control of Pollution by Organohalogen Compounds (1989)

9. In 1989 it was agreed to amend the Dumping Protocol in order to ban specifically ocean incineration activities in the Mediterranean.

Furthermore, measures will have to be prepared, reviewed and adopted by 1995 for all the other substances appearing in the Black List and Grey List of the Land-based Protocol, in accordance with a calendar for the implementation of the Land-based Protocol that was adopted in 1985. To implement all these measures at the country level is going to be a very hard task.

Co-operation in Cases of Emergency

Conscious of the ever-present and growing threat to the Mediterranean environment from massive pollution by oil and other harmful substances, the coastal states co-operate, through MAP/Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea, located in Malta, with a view to preventing, controlling and combating these types of pollution.

The principal objective is to facilitate co-operation among the States, Parties to the Protocol in case of emergency and to undertake pollution response preparedness activities, in particular regarding operations of mutual assistance.

Within the framework of the development of a Regional Information System, the Centre collects, disseminates and keeps up to date the information necessary to start operations of mutual assistance, notably data concerning the responsible national authorities, equipment, experts and companies offering services.

On the other hand, States which had so requested were helped to develop their national contingency plan and to prepare bilateral operational agreements. A training programme and exercises for testing the regional communication system in order to make sure that transmission, reception and dissemination of alerts and information concerning accidents involving oil and other harmful substances were developed. Operational arrangements and guidelines aimed at facilitating mutual assistance between Parties to the Protocol were prepared.

Managing coastal areas

Experience has shown that the overwhelming causes of marine pollution originate on land and are due to improper management of coastal areas and of major river basins.

In the Mediterranean the priority subject areas of concern to all coastal States have been identified as early as 1977 and the Regional Activity Centre for the Priority Actions Programme, located in Split, was set up to join national institutions in a series of networks for each component: water, soils, aquaculture, coastal historic settlements, seismic coastal areas. This has resulted in a pooling of experience for developing an endogenous capability and national self-reliance.

A new problem that has recently come to light is the traffic of toxic waste which can be curbed only through international co-operation, and the reduction of waste at the source.

On the basis of the data on marine pollution, and on coastal sources, of pollution abatement technology that is now available, and in order to promote the application of the common measures in specific coastal areas, the Mediterranean coastal States decided to refocus their programme towards the planning and management of coastal areas.

The refocusing was started in a few representative areas proposed by the countries concerned and accepted by the Contracting Parties. They include at present the Bay of Kastela at Split, Yugoslavia, the Bay of Izmir, Turkey, the Island of Rhodes, Greece, and the Syrian coast. Preparatory work has also started in the area of Fuka/Marsa Matruh, Egypt and Sfax, Tunisia. In each area a co-ordinated programme is agreed upon with the national and local authorities to strengthen local capabilities, mobilize national investment and attract further international co-operation. Already the World Bank and the European Investment Bank have agreed to co-ordinate their efforts in three out of the four coastal area programmes approved.

Futures of the Mediterranean Basin

All the efforts described so far were aimed at identifying and combating existing pollution and represent remedial action taken to correct decades of neglect.

Another major component of the Action Plan, called the "Blue Plan", analyzed through the Regional Activity Centre for the Blue Plan, located in Sophia Antipolis, the environment-development relationship in the future, taking the year 2025 as the horizon. This is the first exercise undertaken in a clearly defined area encompassing eighteen states with a total population of 360 million, starting from their present natural resources base. Alternative scenaria have been built around different projections of population growth, energy and food requirement, tourism and industrialization trends, with the foreseeable impact on the quality of the coastal and marine environment.

Population estimates range from 520 to 570 million of which two thirds will be on the east and south of the basin. Litoralisation and urbanization are predicted to continue. Energy requirements are estimated at 1000-1500 million tons of oil equivalent which would involve the construction of 150-200 new thermal power stations, mostly along low-lying coastal areas. Water shortage emerges as the single greatest bottleneck and the potential source of serious conflict in the area. Combined with water shortage, the loss of productive soil and vegetation cover figures as the main obstacle to self-sufficiency in food in the Southern Mediterranean.

A major expansion of heavy industry (cement, iron and steel) is predicted in the South with the risk of large-scale air and water pollution.

The scenaria are built around various levels of environmental consciousness and of international co-operation. Depending on the national policies pursued, the impact on the environment will be more or less acute (hence the word "futures", indicating that a degree of choice still remains, if the right decisions are made).

The study, based on extensive consultations with coastal States, twelve technical symposia, analysis and policy debate, draws the sobering conclusion that - in the particular Mediterranean situation - only with the utmost restraint, careful use of existing resources and a greatly increased international co-operation can the expected increase in population, industrial production, tourism, etc., coexist with the desirable quality of the marine and coastal environment[1].

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1. Le Plan Bleu: Avenirs du Bassin Méditerranéen; sous la direction de Michel Grenon et Michel Batisse; Programme des Nations Unies pour l'Environnement, Plan d'action pour la Méditerranée. Economica, 1988.

   Futures for the Mediterranean Basin: The Blue Plan; Edited by Michel Grenon and Michel Batisse. United Nations Environment Programme/Mediterranean Action Plan. Oxford University Press, 1989.

Protected Areas and Endangered Species

In order to promote the objectives of the Protocol concerning Specially Protected Areas, the Regional Activity Centre for Specially Protected Areas, located in Tunis, assisted the coastal States in the implementation of the protocol through the preparation and adoption of the Guidelines for the Selection, Establishment and Management of Protected Areas, the Action Plans for the Conservation of Mediterranean Marine Turtles and Monk Seals, and the identification and protection of at least 50 new marine and coastal areas or reserves of Mediterranean interest.

Training programmes for experts in this field were also realized. Finally, a network of managers of protected areas is being developed.

International co-operation, transfer of technology and funding requirements

A significant reduction of Mediterranean pollution through the application of common standards and quality criteria requires investments, financial incentives and disincentives, that cannot be mobilized within the existing budgetary structures of the Mediterranean Action Plan.

The notion of the Mediterranean as a common sea for which common policy and investment plans should be developed is not yet widely accepted. New sources of financing, tapping those economic activities that directly benefit from it (tourism, fisheries, shipping) will have to be considered.

Ten targets have been clearly identified by a ministerial level conference held in Genoa, Italy, in 1985 and included in the Genoa Declaration:

(a) Establishment of reception facilities for dirty ballast waters and other oily residues received from tankers and ships in ports of the Mediterranean;

(b) establishment as a matter of priority of sewage treatment plants in all cities around the Mediterranean with more than 100,000 inhabitants and appropriate outfalls and/or appropriate treatment plants for all towns with more than 10,000 inhabitants;

(c) applying environmental impact assessment as an important tool to ensure proper development activities;

(d) co-operation to improve the safety of maritime navigation and to reduce substantially the risk of transport of dangerous toxic substances likely to affect the coastal areas or induce marine pollution;

(e) protection of the endangered marine species (e.g. Monk Seal and Mediterranean Sea Turtle);

(f) concrete measures to achieve substantial reduction in industrial pollution and disposal of solid waste;

(g) identification and protection of at least 100 coastal historic sites of common interest;

(h) identification and protection of at least 50 new marine and coastal sites or reserves of Mediterranean interest;

(i) intensify effective measures to prevent and combat forest fires, soil loss and desertification;

(j) substantial reduction in air pollution which adversely affects coastal areas and the marine environment with the potential danger of acid rains.

Turning to the preventive steps, more integrated planning of development efforts, joint ventures, optimal use of natural and manpower resources on a basin-wide scale, hold the key to reducing the environmental impact while increasing economic activities. For this tohappen appropriate fora will have to be created. The Mediterranean Action Plan, whose structures have been progressively stretched to cover water and soils, aquaculture, historic centres and protected areas, will have to be reviewed and strengthened. Even so, it cannot alone become a substitute for multilateral political dialogue, greater interplay with the Community institutions, a more generous flow of bilateral resources, with an expanded role for the non-governmental and voluntary organizations integrated in the overall effort.

The geographical proximity of the 18 countries concerned, the common nature of the problems faced, the existence of a rich technological pool and capacity for innovation, make the Mediterranean Basin the number one region where the new environment/development equilibrium can be achieved. It can serve as a testing ground for ideas and solutions from which other areas could benefit.

Above all it will be watched as an indicator and a test case. If the challenge cannot be met in the Mediterranean, many other regions of the world that are poorer in many respects and subject to graver environmental threats, past and present, stand no chance to achieve that equilibrium.