



The Mediterranean Action Plan phase II and the revised Barcelona Convention: new prospective for integrated coastal management in the Mediterranean region

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ABSTRACT

This paper presents integrated coastal management (ICM) relevant information on the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP) and its hitherto and future involvement in the initiation and establishment of the ICM process in the region. The conceptual, legal and institutional basis of MAP, as established in 1975, is described. The MAP 1975–1995 period is characterized by a gradual refocusing from a programme for the protection of the marine environment towards a complex programme oriented at environmental protection of coastal areas and rational management of resources within the context of integrated planning and coastal management. The major ICM-related activities and achievements of MAP are presented and commented upon. The concept, contents and impacts on ICM of the revised Barcelona Convention and of the MAP Phase II documents, adopted in 1995, are presented and analyzed. Some prerequisites for a successful further involvement of MAP Phase II in ICM are listed. Finally, the organization of a Mediterranean Conference on ICM is proposed, as well as the opportunity of adoption of a MAP Protocol on ICM.

The MAP Phase II programme, if properly implemented, should significantly contribute to the attainment of the critical momentum for the establishment and permanent implementation of the ICM process in all the countries of the region. Copyright © 1996 Elsevier Science Ltd.

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1. BASIC INFORMATION ON THE MEDITERRANEAN REGION

Few regions in the world are so rich in natural resources and beauty, so important for the history and culture of mankind, so abundant in diversity and as united an entity as the Mediterranean region. The region is shared by three highly industrialized countries on its north-western coasts, by a few countries located in the northeastern part which have already reached a certain level of development, and by a number of developing countries on its eastern and southern coasts.

The Mediterranean sea washes some of the most beautiful and attractive coastal areas of the world, many areas of utmost importance for human culture and history and a great number of natural reserves and marine parks.

The political map of the region is composed of 21 independent coastal states and one autonomous territory (Gaza Cis-Jordan entity).

Due to a strong, predominantly uncontrolled and often non-sustainable development, many Mediterranean coastal areas are over built and over exploited and/or polluted, and a large number of coastal resources are improperly used, depleted or endangered.

The sources of pollution are still predominantly located at the northwestern coasts and in the deltas of the big rivers (the Ebro, Rhone, Po and Nile). However, the highly industrialized Mediterranean countries have already during the 1980s reached the upper limit of development of those industries contributing to pollution and a number of successful national and local actions, most of them following the European Union (EU) Directives, have resulted in a gradual but steady improvement of the situation. Meanwhile, along the eastern and southern coasts uncontrolled development and poor waste treatment technologies, or their absence, have resulted in permanently increasing pollution and, in several cases, in irreversible disruption of local ecosystems. As elsewhere, big harbors, large coastal settlements and coastal industrial complexes are the largest point sources of pollution. Finally, the atmospheric pollution, predominantly of trans-regional character, also plays a considerable role, although with impacts less intensive than those over continental Europe and the Baltic Sea. For a detailed review of the state of the Mediterranean Sea with regard to pollution see Jeftic *et al.* (1989).¹

The high increase of the coastal population in the eastern and southern areas implies the need for urgent further development. Due to the present economic situation in those countries, prerequisites for such development are not adequately met in most of them.

The basic problem related to environment–development interrelations in the region is how to protect and enhance the environment, meeting simultaneously two different development requirements:

- that of the stabilized population on the northwestern coasts, with high living standards requiring intensive exploitation of resources and resulting in high pressure on ecosystems, and
- that of the strongly growing population at the eastern and southern coasts, requiring eradication of poverty, rapid economic growth, increase of the present level of the quality of life and high increase of employment opportunities.

Some of the recent studies, and in particular the results of the MAP Blue Plan exercise,² indicate that the prospective for a more harmonized development has to be looked for in an increased and improved north–south and south–south cooperation and in concerted and harmonized activities oriented at achieving conditions for sustainable development, supported by an increased international assistance to the developing countries of the region.

The importance of and impacts from recent political changes on the general situation in the region must be mentioned: change in the East–West political relations, the peace process in the Middle East, the emergence of a stronger Mediterranean-oriented EU policy, the Dayton agreement on Bosnia and Herzegovina, the impact of GATT, etc. The consequences and significance of these changes still need to be analyzed and studied.

Although the process of integrated coastal management (ICM) is ‘a must’ for the region, its implementation in most of the coastal states is in its initial phase only, and in some of them it has not yet started at all. The present ICM relevant institutional arrangement, the legal framework and the planning system in many of the Mediterranean countries, particularly those non-members of the EU, are still of the classical sectorial type, with varying degrees of intersectoral integration achieved, and in some cases without any integration at all. Such a situation results in inappropriate planning, absence of long-term ICM policy and strategies, and in priorities being given to short-term effects and interests. Planning and management procedures specific for coastal areas are implemented only in few countries and with varying success. The same is valid for market-oriented economic instruments. In most cases the involvement of the general public and coastal related stakeholders in the ICM is only in its initial phase.

For a detailed insight into the state and problems related to sustainable development and environment–development interrelations

in the region a rich literature is available, but probably the most comprehensive and appropriate source is The Blue Plan document of the Mediterranean Action Plan (UNEP).

For the purpose of this article, and having in mind the global character of the journal *Ocean & Coastal Management*, some basic information on the Mediterranean region is presented in Table 1 and a map of the Mediterranean watersheds is presented in Fig. 1.

2. BACKGROUND INFORMATION ON INTEGRATED COASTAL MANAGEMENT (ICM) IN THE REGION

The first sporadic initiatives related to ICM in the Mediterranean had already started by the late 1970s with few national or United Nations Development Programme (UNDP) funded projects (e.g. the Languedoc-Roussillon project in France; the UNDP projects for the Southern and later on for the Northern Adriatic; the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and Biosphere Programme (MAB)—seven activities related to small Mediterranean islands: Gozo, Malta; Kerkennah, Tunisia; Salina, Italy; Skiatos and Skopelos, Greece). The Mediterranean Action Plan (MAP), as part of the UNEP Regional Seas Programme, was established in 1975 and the Barcelona Convention adopted in 1976 entered into force in 1978. Already in 1978 MAP set base for two of its components: (1) the Priority Actions Programme (PAP) and (2) the Blue Plan, as two complementary programmes oriented at integrated planning and management of coastal resources. Both programmes started in the early 1980s.

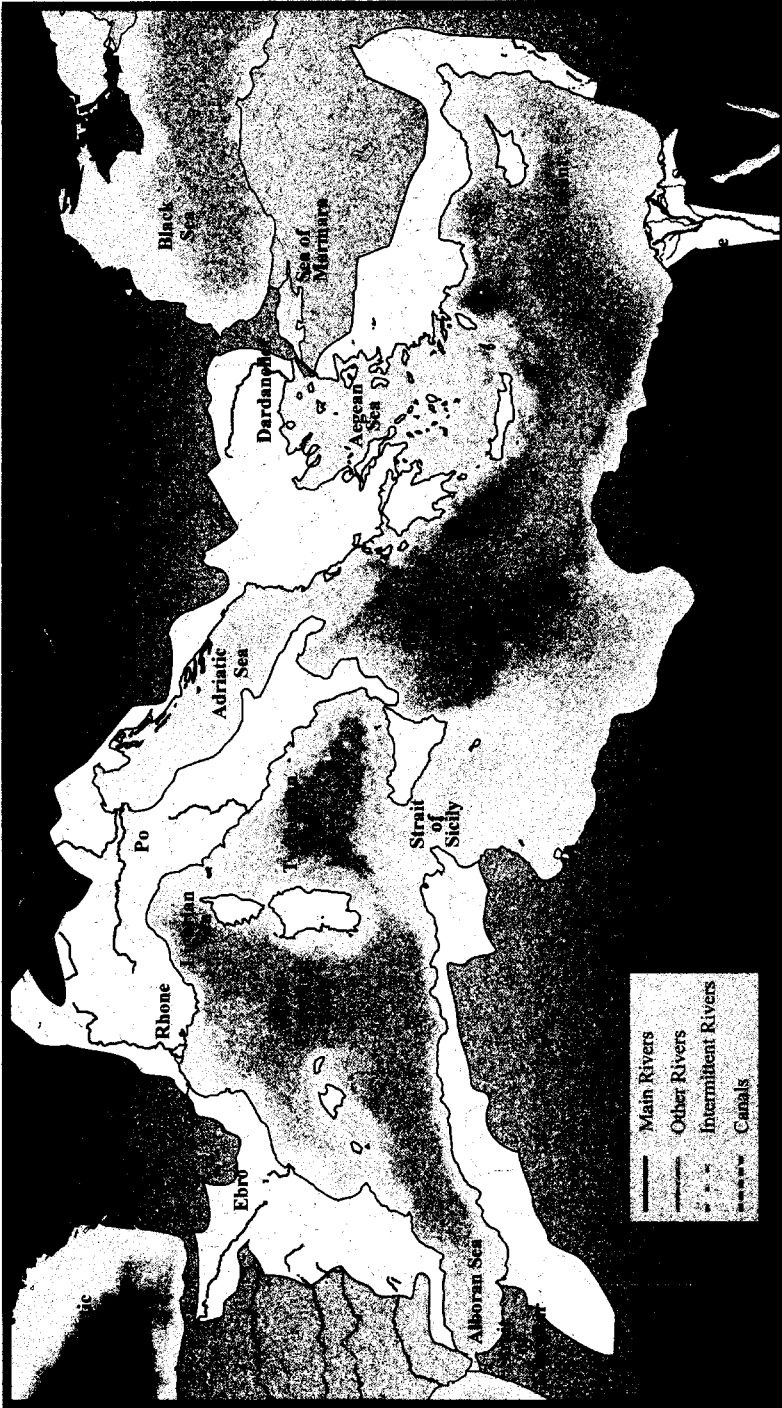
In 1985 the Mediterranean coastal states, in their role of Contracting Parties to the Barcelona Convention, adopted the Genoa Declaration, an important policy document, preceding the involvement of MAP in ICM. The Charter of Nicosia was adopted five years later at a meeting of Mediterranean ministers in charge of the Environment and the member of the Commissions of the European Community responsible for the Environment.

In the same period the Food and Agriculture Organization of the United Nations (FAO) started several ICM initiatives, mainly, but not only, focused on fisheries, water resources and soil management.

In parallel with the above activities, individual Mediterranean countries and the European Commission (EC) were dedicating more attention to problems related to coastal areas. From 1985 up to the early 1990s France, Italy, Spain, Tunisia and Turkey adopted relevant

TABLE 1
Basic information on the Mediterranean region

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- Meeting point of Europe, Asia and Africa, one of the cradles of human civilization
 - The Mediterranean Sea: almost enclosed, turnover period 80–90 years, weak tides, deficient hydrological balance; net inflow from the Atlantic $41\,000\text{ m}^3\text{ s}^{-1}$, from the Black Sea $6\,000\text{ m}^3\text{ s}^{-1}$, runoff and precipitation 15 000; low biological productivity
 - 21 Mediterranean coastal states: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey, FR Yugoslavia (Serbia and Montenegro); four countries (France, Greece, Italy, Spain) are members of the European Union; one autonomous territory (Gaza Cis–Jordan entity)
 - Total surface area: 8 million km^2 ; population in 1993 more than 400 million (estimate), 7% of the world population; 554 million in 2025, increasing 4 million in the north coasts, 148 million in the south and east coasts
 - Active plate tectonic processes: divergence of the Arabian–African plates, subduction of the African to the European plates, seismic prone area
 - Climate: ‘mediterranean’, 250 sunny days year^{-1} , hot and dry summers, mild winters, seasonal rainfall pattern, disparity north/south in occurrence and amounts of precipitation, uneven water cycle
 - Big rivers: Ebro (Spain), Rhone (France), Po (Italy), Nile (Egypt) deltas
 - Coastline length: 45 000 km, out of which islands coastline equals 17 700 km
 - Urbanization on coastline: 540 coastal settlements with more than 10 000 inhabitants each, out of which 70 with more than 100 000 and 10 with more than 800 000; 65% of coastline is urbanized
 - Mediterranean coastal areas: unique, attractive, specific flora and fauna, natural parks, fragile ecosystems
 - Biodiversity: Mediterranean specific, many rare and endemic species, most of them endangered, some disappearing
 - Development level: great differences (north–south, north–east); GNP per inhabitant average differential from 10 to 1; GNP France, Italy and Spain (35% of the Mediterranean population) 85% of the overall GNP
 - Common Mediterranean culture and history: hundreds of historic, archaeological and natural reserve sites making part of the world’s cultural and natural heritage. Religions (in alphabetic order): Catholic, Jewish, Moslem, Orthodox, etc.
 - Limited agricultural resources, agriculture in coastal areas: typically Mediterranean, in many coastal areas in decline, soil erosion processes (rainfall induced, wind induced)
 - Forests in decline, covering only 5% of the region
 - Industry: 16% of the world industry; north: low growth rates, decline of primary production coastal industry; east and south: transfer of technologies, medium and high growth rates
 - Energy consumption: 600 million tons of oil equivalent (1988); 80% in the northern part
 - International tourism: 33% of the world international tourism: 147 million international visitors in 1990
 - Maritime transport: 200 million tons of oil per year (30% of the world oil’s transport), 200–250 large oil tankers permanently in navigation, 60 large ship accidents per year
 - Climate change: many coastal areas, in particular semi-enclosed bays, deltas and lowlands to be highly affected by the impact of expected climate change
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Mediterranean Sea Drainage Basin

Fig. 1. The drainage basin of the Mediterranean Sea.

Coast Laws (or Shore Acts). Unfortunately none of these has established the institutional arrangements needed for the integration of sectoral policies and the decision making process. Several countries developed their economic and land-use planning systems towards a more integrated practice. Generally speaking, so far the process of integrating decisions related to coastal areas is oriented predominantly at environment protection only. Almost all countries have some institutionalized form of interministerial coordination related to environmental protection, but the impacts of these on decision making are still sporadic and weak.

An important role in initiating the ICM process in the region is being played by the EC, now the EU. During the period 1990–1995, The Environmental Programme for the Mediterranean (EPM) through the Mediterranean Environment Technical Assistance Program (METAP), sponsored by the World Bank, strongly ICM oriented, mobilized approximately US\$ 30 million in 16 Mediterranean states.³ The EU is presently initiating a Euro Mediterranean programme, to be partly dedicated to ICM. More details on EU involvement in the region are presented in the article by S. Belfiore in this issue.⁴

The period from 1990 up to the present is characterized by the implementation of a number of ICM projects, implemented by MAP, UNDP, EPM–METAP, some of them sponsored or cosponsored by the World Bank. Beside practical outputs, all these projects acted as triggering factors for the initiation of the ICM process in relevant countries.

Further impetus was generated by a number of international conferences: (1) the United Nations Conference on Environment and Development (UNCED) in Rio, 1992 (the Rio Declaration and Agenda 21—Chapter 17 of which is of particular importance for ICM); (2) two ICM Conferences held in Genoa in 1992; (3) the 1993 World Coast Conference held in Noordwijk (Holland); (4) the MEDCOAST Conferences held in Antalya (Turkey) in 1993 and in Tarragona (Spain) in 1995, (5) the EMECS '93 held in Baltimore, etc.

Furthermore, a number of ICM methodological documents (some of them Mediterranean specific), published in the same period provided guidance to ICM-involved institutions and practitioners. Not less important for the initiation of the process were national networks of ICM interested non-governmental organizations (NGOs) and the growing awareness of the general public on the needs for and benefits of ICM. Few regional scale ICM relevant NGOs (International Centre for Coastal and Ocean Policy Studies—ICCOPS, MEDCOAST, EURO-COAST) were established and started to be involved in the process.

Increased ICM-related activities also resulted in the understanding of the need to strengthen the process of educating regional coastal managers and practitioners. The present practice of sporadic national or international initiatives and of the on-the-job training within ICM projects, should be upgraded by creating conditions for a systematic education process. This problem was presented and discussed at a recent workshop held in Rhodes Island, organized at interregional scale by the Rhodes Island University.⁵

Finally, the most recent initiatives refer to post-Rio activities:

- adoption of the Tunis Declaration on Sustainable development in the Mediterranean and of the MED Agenda 21;
- revision of the Barcelona Convention and adoption of the MAP Phase II; and
- the EU Initiative on Euro-Mediterranean Cooperation, as referred to above.

These initiatives might be considered as new milestones for the ICM process in the region, and will be presented and commented on in detail in the following chapters.

3. THE MEDITERRANEAN ACTION PLAN (MAP) IN 1975–1994

3.1. Historic background

After its establishment in 1972, UNEP dedicated its activities, among others, to environmental problems related to oceans and regional seas. In this initial phase the Mediterranean was the pilot region for UNEP. After the invitation of the Executive Director of UNEP, several meetings of the representatives of Mediterranean coastal states were organized in order to establish a comprehensive environmental programme for the region. Finally in 1975 The Intergovernmental Meeting on the Protection of the Mediterranean Sea (Barcelona, 28 January–4 February) adopted the Mediterranean Action Plan. One year after, the Conference of Plenipotentiaries of the Mediterranean Coastal States for the Protection of the Mediterranean Sea (Barcelona, 12–16 February 1976) adopted the Convention for the Protection of the Mediterranean Sea against Pollution, hereinafter called the Barcelona Convention, and the first two related Protocols (the ‘dumping’ and the ‘emergency’ protocols). Three more protocols were adopted later on: the ‘LBSP’ (Land-Based Sources Protocol), the ‘SPA’ (Specially Protected Areas)

and the 'offshore' protocols—more details on protocols will be presented in Section 3.3.

At the moment of its adoption in 1976, 12 coastal states and the EC signed the Convention in their role of Contracting parties (CPs). This number gradually increased, including in the late 1980s all 18 coastal states. After the dissolution of the former Yugoslavia the present number of Contracting Parties counts 21 coastal states and the EU.

A gradual involvement of MAP in ICM started in the mid-1980s, in particular after the adoption of the Genoa Declaration in 1985⁶ and the Charter on Euro Mediterranean Cooperation concerning the Environment in the Mediterranean Basin (Nicosia, 1990).⁷ The MAP Blue Plan exercise started in the early 1980s and the ICM Pilot Projects of the MAP Priority Actions Programme in 1987. In 1989 MAP adopted the proposal of the Executive Director of UNEP on a refocusing of the Programme on environmentally sound integrated planning and management of the Mediterranean Basin.⁸ As the consequence, the MAP Coastal Areas Management Programme (MAP CAMP) started in 1990.

After the Rio UNCED in 1992, at the VIII Ordinary Meeting (OM) of the Contracting Parties (Antalya, 1993), it was decided to initiate activities related to the implementation of the Rio documents. In 1994 a Conference held in Tunis adopted The Tunis Declaration on Sustainable Development in the Mediterranean, and the MED Agenda 21 as a draft policy document. Finally, at the IX Ordinary Conference of the Contracting Parties held in 1995 in Barcelona the Convention was revised in order to comply with the Rio documents and the MAP Phase II was adopted.

3.2. The establishment of MAP in 1975

The initial MAP document, adopted in 1975,⁹ contains a set of recommendations related to four main aspects of the future Mediterranean cooperation:

- integrated planning of the development and management of the resources of the Mediterranean Basin (IPM);
- coordinated programme for research, monitoring and exchange of information and assessment of the state of pollution and of protection measures (MEDPOL);
- Framework Convention and related Protocols with their technical annexes, for the protection of the Mediterranean environment;
- institutional and financial implications of the Action Plan.

3.2.1. *Recommendations of the MAP document*

The recommendations of the document, related to the IPM component contain, *inter alia*:

- a consideration that the IPM issue ‘...raised delicate and vital problems, having regard to inequality in economic and social levels prevailing between the various coastal states’;
- the countries declared ready to make joint studies of proposals aimed at reconciling the demands of development with the need to protect and enhance the Mediterranean environment, with a view to optimal use of resources;
- requested to the Executive Director of UNEP to propose, in consultation with national governments and the UN and other institutions concerned, a relevant programme oriented at better utilization of resources in accordance ‘...with sound long-term environmental management rules’;

The above programme to include:

- development of rational technologies related to waste management, soil protection, water resource management, use of marine resources and aquaculture;
- studies of costs and benefits of environmentally sound development on impacts of economic development, in particular of industry and tourism in the region ‘...taking in account national sovereignty and the level and policies of development in each country’;
- studies of vocational training system;
- training and technical assistance, particularly in favor of the developing countries.

3.2.2. *Recommendations concerning MEDPOL*

The recommendations concerning MEDPOL contain a list of recommended studies and monitoring programmes, namely of: petroleum hydrocarbons, heavy metals and Hg in particular, DDT and PCBs, effects of pollutants on marine organisms, communities and ecosystems, coastal transport of pollutants and coastal water quality.

3.2.3. *Convention and protocols*

The document recommends the setting up of a framework convention and of protocols concerning: cooperation in case of emergency caused by pollution from oil or other harmful substances, and prevention of dumping waste from ships and aircraft, thus providing the legal bases for regular cooperation to protect the marine environment.

3.2.4. *Institutional and financial implications*

Finally, regarding the institutional and financial implications, the document requested the following of the Executive Director of UNEP:

- to use available funds for minimum relevant staffing;
- to establish simple coordination mechanisms;
- to study—as the programme develops—the needs for strengthening appropriate institutions in the region, establishing specialized regional organisms to undertake parts of the programme;
- to consult the Mediterranean governments on the establishment of a regional oil-combating centre in Malta.

The budgetary and accounting framework and methods established by the UNEP Governing Council were adopted as basic financial arrangements for MAP.

The above, although a very condensed presentation of the document, indicates its main characteristics, namely:

The programme related framework:

- IPM defined as an essential part of MAP;
- interrelations among IPM and pollution related activities defined almost in harmony with the future concept of sustainable development;
- IPM as a process identified in harmony with the initial, but limited, experiences hitherto achieved in the world;
- the priority fields of the IPM component identified;
- training and technical assistance included as important component of the IPM.

The policy approach:

- the political will for a cooperation at regional level expressed and measures for the implementation of such cooperation defined;
- the policy approach to IPM: cautious due to political differences and inequalities in the social and economic level among the coastal states;
- the principle of sovereignty of each state related to the future cooperation emphasized;
- the principle of particular attention to be given to the needs of Mediterranean developing countries adopted.

It may be asserted that the programme related framework was an excellent basis for the initiation and implementation of ICM in the region, but the policy approach was more cautious and restrictive. This

basic dichotomy of MAP, created at its beginning, resulted later on in slowing down and/or postponement of the full implementation of ICM within MAP. The cautious policy approach was influenced by the situation in the region and the early stage of IPM implementation in the world. Such an approach had its immediate impact on the formulation of the Convention.

3.3. The Barcelona Convention

The Convention (its full and official title being 'The Convention for the Protection of the Mediterranean Sea against Pollution and its Related Protocols')¹⁰ after its adoption in 1976 entered into force in 1978. Basic information on the Convention is given in Table 2 and on the Protocols in Table 3.

To become Contracting Parties to the Convention the states had to sign the Convention and at least one of its related protocols.

TABLE 2
The Barcelona Convention (1976)

The international context

UNEP: focal point for environmental actions and coordination within the UN system

Oceans and Regional Seas: one of UNEP priority areas

Regional Seas Programme (RSP): 12 Regional Seas Programmes; cooperation among the governments of the regions; coordination of actions through UNEP

Contracting Parties to the Convention: 20 Mediterranean coastal states and the EU, one autonomous territory (Gaza Cis-Jordan) as an observer

The character of the Convention

'Umbrella' agreement, providing obligation to: establish cooperation related to integrated planning of development of Mediterranean resources; implement measures against pollution of the Mediterranean Sea area, and to protect and enhance the marine environment; with the provision for adoption of Protocols prescribing measures, procedures and standards for the implementation of the Convention

Framework obligations

Sources of pollution to be controlled: dumping, accidents at sea, sea-bed exploitation, land-based sources

Cooperation in: integrated planning of development of resources; pollution monitoring and research, emergencies

Major tasks: provision of technical and other assistance, priority to be given to special needs of the Mediterranean developing countries

Institutional arrangements

UNEP as secretariat, the Contracting Parties, the Meetings of the Contracting Parties, the Mediterranean Trust Fund administered by UNEP, MAP (the Coordinating Unit and six Regional Activity Centers)

TABLE 3
The Barcelona Convention: Protocols

Protocol status as at 30 April 1995

1. *'Dumping' Protocol^a:*

The Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft

Status: Adopted: Barcelona, 16 February 1976; Entry into force: 12 February 1978. Ratified by 21 Contracting Parties.

Responsible MAP component: The Map Coordinating Unit, Athens

2. *'Emergency' Protocol:*

The protocol concerning Cooperation in Combating pollution of the Mediterranean Sea by Oil and other Harmful Substances in cases of Emergency

Status: Adopted: Barcelona, 16 February 1976; Entry into force: 12 February 1978. Ratified by 21 Contracting Parties.

Responsible MAP component: REMPEC, Malta

3. *'Land-based Sources' Protocol (LBS):*

The Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources

Status: Adopted: Athens, 17 May 1980; Entry into Force: 17 June 1983. Ratified by 21 Contracting Parties.

Responsible MAP component: MEDPOL, Athens

4. *'SPA' Protocol^b:*

The protocol concerning Mediterranean Specially Protected Areas

Status: Adopted: Geneva, 3 April 1982; Entry into force: 23 March 1986. Ratified by 21 Contracting Parties.

Responsible MAP component: SPA RAC, Tunis

5. *'Offshore' Protocol:*

The Protocol for the protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil

Status: Adopted: Madrid, 14 October 1994; Not yet entered into force.

Responsible MAP component: MEDPOL, Athens

6. *'Hazardous Waste' Protocol:*

The Protocol on the Prevention of Pollution of the Mediterranean Sea resulting from the Transboundary Movements of Hazardous Wastes and their disposal

Status: in preparation; a Conference of Plenipotentiaries to be convened in 1996

^aAmended in June 1995.

^bSubstituted in June 1995 by a new Protocol on SPA and Biodiversity.

As geographic coverage of the Mediterranean Sea, the Convention defined the sea area from the Straits of Gibraltar at the western side, to the Straits of Dardanelles (Turkey) at the eastern side; the Marmara Sea and the Black Sea thus being excluded.

The Convention envisaged the adoption of additional Protocols and defined the general obligations concerning cooperation and joint undertakings related to the prevention and control of pollution from dumping from ships and aircraft, from exploration and exploitation of the continental shelf and the seabed, and from land-based sources. Framework obligations were defined related to: cooperation in case of emergencies, monitoring of pollution, technological and scientific issues and assistance, with priority to be given to the needs of Mediterranean developing countries (Art. 11.3). The role of the Secretariat of the Convention was assigned to UNEP. The role of the meetings of the Contracting Parties was defined, provisions for adoption of Rules of Procedure and financial rules envisaged, as well as the procedures for liabilities and compensation for damage resulting from pollution, for compliance control and settlement of disputes and for the revision of the Convention and its Protocols. The government of Spain was nominated Depository of the Convention and its relevant responsibilities were defined.

The original text of the Convention, as adopted in 1976, remained unchanged until its recent revision in 1995, however, three additional Protocols were agreed upon and adopted (see Table 3). Meanwhile, in the same period a number of changes related to environmental protection and coastal management occurred in the world: a new concept and strategy of environmental protection; the concept of sustainable development defined and developed; and the ICM process established and gradually implemented in a number of countries. Due to these changes, objections regarding the Convention arose during the second decade of its implementation, in particular within the scientific community and some ICM-related NGOs, which had been established in the meantime.

The general characteristics of the Convention might be defined as follows:

- The basic orientation is on pollution and environment related issues.
- The marine environment is the main object of interest.
- ICM-related issues and the coastal (land) areas are dealt with only *implicite* (the management issues: undertakings related to pollution abatement, protection from pollution, enhancement of the environment (Art. 4.1), cooperation in case of emergency and related prevention measures, organization and implementation of national monitoring programmes, reporting, etc.; coastal areas: promoting measures concerning pollution sources (Art.

4.3), coastal management approach in LBSP and SPA protocols, etc.).

- The Convention provides for policy and framework obligations only, strict procedures and/or obligations are not defined.
- There will be no recurrence of the need for integrated, coastal areas specific approaches.
- There is no provision for joint regional initiatives related to improvement of relevant national legislation and/or institutional framework.
- No provision is made for the involvement of, or cooperation with, coastal stakeholders, NGOs and/or the general public involved.
- Evaluation of the implementation of the Convention and MAP is within the competencies of the Meetings of the Contracting Parties, on the basis of regular Reports of the Executive Director of UNEP.

The absence of provisions related to ICM is evident. The 1976 Convention was less ICM-oriented than the 1975 MAP document. However, despite this, the Convention should only be evaluated jointly with the MAP 1975 document.

There should be no doubt that the most important features of the Convention were its flexibility and provision for adoption of additional protocols. On that basis, for 20 years MAP was able to implement its programme as defined by the Contracting Parties, despite political differences and the impacts of the Cold War and the Middle East conflict. The author supposes that in this past period the Convention was the only international legal document at the Mediterranean scale, providing cooperation of all Mediterranean coastal states at government level. The flexibility of the Convention, and in particular its joint application with provisions adopted for MAP, provided the legal base for 20 years of Mediterranean cooperation in the field of environmental protection, for a gradual initiation of ICM, and finally for its revision and adoption of MAP Phase II, oriented towards the implementation of the Rio documents.

3.4. Implementation of ICM-related activities

Even a summary review of all MAP activities implemented in the 20 year period would require a presentation larger than this entire article. Therefore, only the main ICM-related activities of MAP and in particular those of the PAP and the Blue Plan will be presented.

TABLE 4
Institutional arrangement of MAP

The Contracting Parties (CPs) of the Barcelona Convention: defining the Programme, approving the MAP Workplan at biennial base, evaluating the implementation, providing funds for the budget through agreed and voluntary contributions.

Ordinary Meetings (OM) of the Contracting Parties: deciding on Programme, Workplan and Budget on biennial base, ministerial or deputy ministerial level; Extraordinary Meetings convened if appropriate and necessary.

The Bureau of the Contracting Parties: composed of CP representatives members of the Secretariat of the past CP Meetings, biennial mandate, deciding on budgetary and logistics of the Workplan implementation between two Ordinary Meetings, preparing proposals for the next OM.

Committees: The Scientific Committee and the Socio-Economic Committee composed of representatives of all CPs (usually the relevant NFPs), convened preceding the CP Meeting to evaluate the implementation of various component and to discuss and formulate the Workplan and budget proposals for the next biennium.

Secretariat to MAP: UNEP, the Executive Director presenting the biennial Report to the OMs; MAP Coordinating unit reporting to UNEP on quarterly, half-yearly and yearly base on the implementation and budgetary aspects of MAP.

Financial arrangements: CPs contributing to the Mediterranean Trust Fund (MTF) administered by UNEP.

National Focal Points (NFPs): nominated by the governments of the CPs; NFPs responsible for the entire MAP, NFPs for each programme; contact persons or contact institutions representing the relevant CP during regular implementation of the workplan.

Meetings of NFPs for individual programmes: convened if necessary to discuss the implementation and workplan and budget proposals.

The basic institutional arrangement and the organizational structure were defined in the documents described in Sections 3.2. and 3.3. The initial institutional arrangement remained almost unchanged within the entire 20 year period, while the organizational structure was gradually set up and developed according to the development and needs of the Programme. The basic features of the institutional arrangement of MAP are presented in Table 4 and the present organizational structure is shown in Table 5.

The Terms of Reference and the basic thematic framework of the PAP and the Blue Plan were adopted at the Split 1978 meeting on the MAP IPM component. Owing to conceptual reasons, and administrative and financial procedures, both programmes started their activities in early 1980s.

TABLE 5
MAP organizational structure

UNEP Ocean and Coastal Areas Programme Activity Center (OCA/PAC): coordinating MAP with other Regional Sea Programmes, providing professional, technical and scientific guidance.

MAP Coordinating Unit (MEDU): located in Athens coordinating the entire MAP and the workplan implementation, communicating with OCA/PAC and MTF, with MAP NFPs, implementing directly MEDPOL, the scientific and training programmes, climate change related studies, coordinating ICM related activities (MAP Coastal Areas Management Programme—MAP CAMP) and allotted funds management.

The Regional Activity Centers (RACs):

The Blue Plan (BP/RAC): located in Sophie Antipolis, France, endorsed with scientific aspects of the Environment/Development interrelations in the Region, observation and systemic and prospective analysis, preparing E/D scenarios at regional, national and local levels (within MAP CAMP), updating regional studies, definition and application of E/D indicators.

The Priority Actions Programme Regional Activity Center (PAP/RAC): located in Split, Croatia, endorsed with practical implementation of the IPM process, oriented at achieving immediate or medium-term results; six Priority Fields of action and ten Priority Actions, implementing individual actions, cooperative projects and PAP related activities within MAP CAMP, developing tools and technologies of ICM.

The Regional Marine Pollution Emergency Response Center (REMPEC): located in La Valletta, Malta, endorsed with the implementation of the Emergency Protocol and of the 'Offshore' Protocol; information, assistance in setting up national preparedness and response systems including emergency plans, training, coordination in case of emergency, models and tools for emergency decision making.

The Regional Activity Center for Specially Protected Areas (SPA/RAC): located in Tunis, endorsed with the implementation of the SPA Protocol, dealing with procedures for selection, establishment and management of protected areas of natural and cultural interest; assistance to countries in development of protected areas, recording and analysis of relevant national legislation and international agreements, implementation of relevant training programmes; preparation and implementation of special Action Plans for the protection of the Monk Seal, of Marine Turtles and of Cetaceans.

The Environment Remote Sensing Center (ERS/RAC): located in Scanzano, Italy; preparing inventory of Mediterranean Remote Sensing Centers, implementing RS techniques in MAP CAMP and other component's activities, monitoring environmental changes and coastal areas inventory, processing and integration of RS data and conventional data.

The Center for Mediterranean Historic Settlements (HS/C): located in Marseilles, France, implementing activities relevant to sites included in the MAP list of 100 Historic Sites of Common Mediterranean Interest; providing technical assistance to interested countries; participating in MAP CAMP; implementing relevant training, disseminating information, establishing communication.

The Center for Clean Technologies: to be located in Barcelona, proposal for the establishment of this Center adopted at the 1995 OM of the CPs, held in Barcelona, not yet established.

MEDPOL: programme implemented by MAP Coordinating Unit: monitoring of marine pollution, data quality assurance, related research programmes, assessment and evaluation of state and trends of marine pollution, training and assistance to national institutions involved in MEDPOL.

The Blue Plan started the implementation of the Environment/Development (E/D) scenario at regional level, with the years 2000 and 2025 as time horizons. An appropriate methodology was developed, a number of sectoral studies prepared on a north/south comparative basis, and several sectoral scenarios. In the final phase, six integrated scenarios were developed, the following three of which were defined in detail, evaluated and analyzed: (1) rapid growth trend scenario; (2) weak growth trend scenario; and (3) alternative balanced economic growth trend scenario. The alternative balanced growth trend scenario was developed with two options, the first based on strong north/south Mediterranean cooperation, the second on intensive links at sub-regional levels; both options presuming an ICM approach.

The results of the Blue Plan scenarios indicated, among other things, that even when applying the recommended options a number of Mediterranean developing countries will not be able to attain sustainable development without coordinated international cooperation and assistance. The results of the Blue Plan exercise have been presented by Grenon and Batisse² and in a number of booklets dedicated to main resources and economic activities. Furthermore, the Blue Plan was involved in the preparation of a number of national E/D scenarios.

PAP started the implementation of individual Priority Actions (PAs) in the period 1982–1983. Table 6 provides a list of Priority Fields and PAs, as defined in the 1978 Split meeting. The initial PAP phase was dedicated to fact-finding missions, national reports and meetings oriented at identifying national, sub-regional and regional priorities in each PA. On the basis of priorities identified, a number of case studies within each PA was prepared, presented and evaluated at regional workshops. Finally training courses were organized and initial methodologies and tools developed. An annotated compendium of relevant PAP documents prepared in that period has been printed and disseminated.¹¹ Some of the individual PAs were implemented with the cooperation and/or participation of other relevant UN agencies: FAO, UNESCO, WHO (the World Health Organization), UNITAR (The UN Institute for Training and Research) and with assistance and/or support of UNEP OCA/PAC (Ocean and Coastal Areas Programme Activity Center) and UNEP GRID (Global Resource and Information Database).

Implementing individual PAs, and in particular the one related to IPM, the need was felt for merging and integrating the results achieved within other actions, as well as the results of other MAP components, into the IPM action. Furthermore, it was felt that the experiences and knowledge accumulated should be tested in practice in coastal areas.

TABLE 6
The Priority Actions Programme: Priority Fields and Priority Actions

<i>Priority Fields (as defined in 1978)</i>	<i>Priority Actions (gradually developed, implementation began 1983–1984)</i>
Human Settlements	Integrated Planning and Management of coastal areas (IPM) Rehabilitation of Mediterranean Historic Settlements (HS) Land-use Planning in Earthquake Zones (EZ) Solid and Liquid Waste Management (SLW)
Water Resources Management	Water Resource Management in Islands and water deficient coastal areas (WRM)
Soil Protection	Soil Protection as an Essential Component of the Protection of the Mediterranean Environment(SP)
Tourism	Development of Mediterranean Tourism in harmony with the Environment (T)
Renewable Sources of Energy	Mediterranean Cooperative Network on Renewable Sources of Energy (RSE)
Aquaculture	Mediterranean Network on environmentally sound management of aquaculture (AQ)
Environmental Impact Assessment ^a	Application of Environmental Impact Assessment in Mediterranean conditions

^aIncluded after 1985 upon decisions within the Genoa Declaration.

This resulted in the 1986 proposal for implementing PAP-related coastal management pilot projects. Four project proposals (for the Bay of Izmir in Turkey, the Kastela Bay in Croatia, the island of Rhodes in Greece, and the Syrian coast) were identified, following previously established criteria, approved and started in 1988. The principles applied, the content, involvement of local authorities and institutions, and initial, although modest results, led to wide support and increased interest among the CPs for such projects. The first ICM-related PAP methodological document (the Common Methodological Framework for Integrated Planning and Management of Mediterranean Coastal Areas) was presented and adopted as a draft document at the 1988 Izmir workshop.¹²

In 1989 the Executive Director of UNEP presented to the CPs the proposal for refocusing MAP on Integrated Planning and Management of Mediterranean coastal areas.⁸ This document might be considered after the Genoa Declaration and the Nicosia Charter as the third

strategy MAP ICM-related document adopted in that period and the first one based fully on the ICM concept. Basic elements of all three documents are presented in Table 7. The gradual shifting from a purely environmental protection concept to a clear and well defined ICM is evident.

In 1989 at the VII Ordinary Meeting (OM) of the CPs the refocusing of MAP on ICM was adopted and the relevant workplan approved. As a consequence, the MAP Coastal Areas Management Programme (MAP CAMP) was developed, envisaging the involvement of all MAP components within it. The first four MAP CAMP projects started in 1990 in the same areas as the previous PAP ICM Pilot Projects.

Basic elements of MAP CAMP are presented in Table 8, the list of implemented or ongoing projects is presented in Table 9 and the content of a MAP CAMP project in Table 10.

The implementation of MAP ICM activities in the 1990–1994 period was characterized by coordinated and more integrated activities of all MAP components within MAP CAMP. Two projects were implemented with external support (the Rhodes Phase II with the support of the European Investment Bank (EIB) and the Albanian Coast Phase II, implemented by PAP and DMA (Dobbin and Milus Ass.) (USA) funded by the World Bank). In the same period the Blue Plan started the preparatory activities for the implementation of the E/D observatory function, while one part of PAP activities was dedicated to the development of tools, techniques and methodology for ICM.

3.5. Evaluation of achievements in ICM

3.5.1. The general framework and conditions which have to be taken into account

A critical analysis of the ICM activities implemented and of the results obtained has to take into account a number of elements determining the general framework and conditions for implementation, such as: (1) the general context of MAP, in particular in its initial stage; (2) the legal and institutional framework established/available; (3) the resources available; (4) problems encountered, etc. Only by taking these elements fully into account can the results obtained and deficiencies identified be correctly evaluated.

Although the author of this article has from 1984 to 1994 been involved in MAP in the role of the Director of PAP/RAC (Regional Activity Center), it should be understood that the following evaluation is his personal opinion only.

TABLE 7

Strategies—from the protection of the marine environment to ICM

The Genoa Declaration

To define strategy of MAP in the decade 1985–1995, adopted at the IV OM of the CPs, Genoa, 1985.

Adopted the 10 priority targets to be achieved:

- 1, establishment of port reception facilities for ballast and bulge waters;
- 2, construction of sewage treatment plants (STP) for big coastal cities;
- 3, construction of submarine outfalls and/or STP for small and medium size coastal cities;
- 4, application of EIA;
- 5, improvement of safety of navigation;
- 6, protection of endangered marine species;
- 7, reduction of industrial pollution and solid waste;
- 8, identification and protection of at least 100 historic sites of common Mediterranean interest;
- 9, measures to prevent/mitigate forest fires, soil loss and desertification;
- 10, reduction of air pollution.

The Charter of Nicosia

The ministers responsible for the environment and the relevant EC Commissioner defined common commitments to:

- achieve in 2025 a Mediterranean environment compatible with sustainable development;
- elaborate and adopt environmental management strategies as an integral part of the socio-economic development of the coastal states;
- implement EIA of development projects;
- apply economic instruments and administrative measures for the integrated management of the environment;
- to carry out a set of practical priority actions: integrated management of coastal zones—in particular natural coastline and urban areas with rapid growth, water resource management, management of Mediterranean plant cover, waste management, monitoring of ecosystems and surveillance of the marine traffic, sustainable energy planning, etc.;
- implement technical assistance: training, exchange of information, networking, public awareness, etc.

MAP refocusing on IPM, upon the address of the ED of UNEP

Adopted in 1989 at the VI OM of the MAP CPs, based on the UNEP policy on the environment and resource management, and the 1975 decision on IPM of the resources of the Mediterranean basin as one of the central objectives and cornerstones of MAP.

Policy orientation recommended: integration of environment and resource management policies dealing with coastal development; environmental and resource management concerns to be integrated into the development decision making process; need to identify, evaluate and put in place appropriate mechanisms; to apply the anticipatory and preventive approach; the regional programme to be integrated towards shared objectives.

TABLE 7—(Continued)

The strategy for refocusing: progressive concentration of ongoing activities on environmentally sound IPM; the Genoa Declaration strategy to be integrated in the refocused IPM framework; to strengthen cooperation with countries and UN agencies on ICZ development and management; the programme to be restructured from 1990 onwards.

Programme orientation: national E/D scenarios to be prepared; the number of ICM pilot projects to be increased gradually; PAP activities to be focused on ICM pilot projects; other programmes to be involved; training on ICM to be intensified, in particular on-site and on-the-job training; information and activities related to raising public awareness on ICM to be intensified.

Institutional arrangements for refocusing on IPM: to develop projects with the involvement of all MAP programmes; MEDU to provide guidance and coordination of the IPM programme; terms of reference for Regional Activity Centers amended as appropriate.

Financial arrangements: proposal for a gradual increase of MAP budget of 10% from one biennium to the next;" as crucial prerequisite for the increase of the number of IPM projects.

"Not approved by the Contracting Parties.

3.5.1.1. *The general context of MAP at this early stage.* The following elements influencing the concept and implementation of MAP should be taken into account:

- the relatively great number of states involved and their differences—political, in the development level achieved, their role in polluting the Mediterranean, the impact of that pollution on national economies and environments, etc.;
- no previous experience related to the preparation of this type of regional cooperation;
- the ICM process having only been initiated in the US in 1971 and the concept of sustainable development presented only after the adoption of the MAP documents;
- the legal MAP framework reflects the needs of a regional cooperation at governmental level on the basis of consensus to be reached for all major decisions and thus the political aspects influencing the decisions must be taken into account.

3.5.1.2. *The legal framework.* As presented in Sections 3.2 and 3.3, from the very beginning of MAP there was a conceptual discrepancy, from the ICM standpoint, between the Convention and the MAP 1975 document. While the Convention was predominantly oriented on the

TABLE 8
Basic elements of MAP CAMP

PAP definition of Integrated Coastal Area Management—ICAM:

- a management process adapted to the conditions in and needs of coastal areas;
- comprehensive, based on rational approach and scientific findings;
- multidisciplinary;
- creates conditions for sustainable development;
- not a substitute for sectorial planning, providing integration of individual resources or 'sectors' management.

Approach: top-down and bottom-up; problem solving rather than problem transferring; prevention rather than cure; precautionary.

Stages: initiation, preparatory, analysis and forecasting, definition of goals and strategies, integration of plans and policies, implementation, and evaluation with feed-back; re-considering after each stage, if necessary.

Characteristics of the Programme:

- conceptual basis: sustainable development, the Genoa Declaration, The Nicosia Charter, the document of the UNEP ED on refocusing of MAP on ICPM, Agenda 21, the Rio Declaration;
- methodology: Integrated Coastal and Marine Areas Management (ICAM), and integrated planning as a major tool;
- thematic framework: all MAP activities, concerted and integrated;
- legal basis: agreements signed with the relevant governments;
- financing: MAP, national and local authorities involved, The World Bank (Kastela, Albanian coast), The European Investment Bank—METAP (Rhodes, 2nd phase).

Contents of MAP CAMP projects:

1. Implementation of MAP legal instruments (Barcelona Convention, LBSP, Emergency and Dumping Protocols, MARPOL, etc.);
 2. Individual resource evaluation and management;
 3. Industrial activities: evaluation and trends;
 4. Mitigation of natural hazards (seismic risk, climate change);
 5. Training on and application of: methodology, tools and techniques of ICM;
 6. ICM: prospective studies, integrated planning studies, management plans and programmes;
 7. Final integrated management document: Integrated Planning Study or Integrated Management Plan.
-

protection of the marine environment, the MAP 1975 document declared IPM of coastal resources as one of its major components. The Convention was a *lege artis* international multilateral agreement, however, the MAP document was not. Such a discrepancy very much influenced the initiation of ICM within MAP. Some elements of the Convention were already outdated by the mid-1980s, but due to the political implications and also perhaps to a certain lack of understanding of the resulting obstacles for the implementation of ICM, and the

TABLE 9
CAMP Projects Implemented by MAP

I. PAP Pilot Projects:

Assessment and management of individual resources, integrated planning studies, capacity building—Kastela Bay, Izmir Bay, Island of Rhodes, Syrian Coast (1987–1988)

II. MAP CAMP 1st generation (comprehensive integrated programmes):

The Syrian Coast (1989–1992)

The Izmir Bay (1989–1993)

The Kastela Bay (1989–1993)

The Island of Rhodes 1st phase (1990–1993)

III. MAP CAMP 2nd generation (in-depth programmes with strong integrative function):

The Albanian Coast, with partial funding from the World Bank (1993–1995)

The Island of Rhodes 2nd phase, with funding from EIB–METAP (1994–1996)

The Region of Fuka, Egypt (1994–present)

Sfax, Tunisia (1995–present)

IV. MAP CAMP 3rd generation (MAP Phase II):

Programmes in preparation for:

Algeria, Israel, Lebanon, Malta, Morocco (to start in 1996)

time- and effort-consuming procedure needed for its revision, the right time for revision of the Convention was still far away.

3.5.1.3. *The institutional aspects.* Clear, flexible and rather general provisions related to institutional and organizational aspects of MAP allowed a gradual development and strengthening of its organizational structure during the whole period.

TABLE 10
Contents of MAP CAMP/EIB–METAP Project

Example: The Island of Rhodes, 2nd Phase

1. Identification of Land-Based Sources of Pollution and Implementation of the Dumping Protocol (Barcelona Convention), implemented by MEDPOL
2. Liquid Waste Management Programme, implemented by PAP
3. Monitoring of Pollution in the Coastal Region, implemented by MEDPOL
4. General Water Resources Master Plan, implemented by PAP
5. Programme of Environmentally Sound Energy Planning, implemented by PAP
6. Programme of Protection of Historic Settlements, implemented by the HS Center in Marseilles
7. Training Programme on GIS (pcARC/INFO), implemented by PAP
8. Environmental Impact Assessment, implemented by PAP
9. Specially Protected Areas, implemented by the SPA Center in Tunis
10. Integrated Planning Study for the Island of Rhodes, implemented by PAP

3.5.1.4. *Capacity building of MAP for ICM.* In its initial stage, due to the predominantly 'marine' orientation and to the fact that some RACs were located in less developed or developing countries, MEDU (MAP Coordinating Unit) and MEDPOL soon reached their operational capacity, satisfying international standards and criteria, and were soon followed by the Blue Plan, located in France. PAP and other RACs needed a somewhat longer initiation period to reach such a level. This was one of the reasons why the first PAP proposals for ICM pilot projects were only presented in 1986.

3.5.1.5. *Involvement of NGOs and coastal stakeholders.* Due to the character of MAP as an intergovernmental cooperation, the initial MAP document and the Convention did not envisage the cooperation with and/or involvement of NGOs and coastal stakeholders. Only in 1989 after the amendments of the MAP Rules of Procedure took place, was the possibility of inviting NGOs to MAP general and topic-specific meetings created, however, this still did not allow their direct involvement in various activities.

3.5.1.6. *Gradual refocusing of concepts and workplan.* Both external and MAP internal development resulted in a gradual refocusing towards ICM. The most important external impacts were the general acceptance of the concept of sustainable development and the progress and results obtained by ICM in many countries and coastal areas. Internal factors influencing the same process were: (1) the gradual institutional and capacity upgrading of MAP; (2) positive experiences and results of the Blue Plan and PAP; (3) strong support of all CPs and the developing ones in particular, for a larger and stronger ICM component; and (4) the address of the Executive Director of UNEP and decisions adopted in 1989. These factors resulted in the development and, later on, the implementation of MAP CAMP. A presentation of various stages of this refocusing is presented in Table 11.

3.5.2. *Main ICM-related problems encountered.*

The following might be considered as main problems related to the implementation of ICM in MAP:

- difficulties in achieving a fully integrated approach within each RAC and at MAP level, certain progress was reached only after 1990;

TABLE 11
Development of MAP in the period 1975–1994

-
1. *Preparatory phase (1975–1978)*: definition of structures and programmes; establishment of the MAP Coordinating Unit in Athens; inter-governmental meetings; the Split meeting in 1978—establishment of the Blue Plan and the Priority Actions Programme.
 2. *Initial phase (1979–1984)*: MEDPOL I, monitoring and assessment of pollution, beginning of the Blue Plan exercise, start of PAP activities, gradual increase of the budget, establishment of ROCC (later REMPEC) in Malta, Protocol on LBSP; Protocol on SPA.
 3. *The Genoa Declaration phase (1984–1989)*: MEDPOL I and II, research on the state of pollution in the Mediterranean, protocol on protection from land-based sources of pollution, launching of the SPA Centre in Tunis, full implementation of PAP (methodology of integrated planning and management, water resources management, soil protection, historic settlements, aquaculture, tourism harmonized with the environment), launching of PAP pilot projects of coastal management, completion of the Blue Plan exercise at the regional level, REMPEC in implementation.
 4. *Refocusing of MAP on coastal management (1989–1994)*: address of the Executive Director of UNEP on refocusing, MAP Coastal Areas Management Programme (MAP CAMP), studies of impacts of the climate change, MEDPOL II, Centre for the Protection of Historic Settlements, Centre for Environmental Remote Sensing, environment/development related prospective studies at national and local levels, methodology of ICAM, tools and techniques for ICAM, training component.
 5. *Refocusing on sustainable development and on the implementation of the Rio documents (1994–1995)*: Agenda 21 for the Mediterranean, Tunis Ministerial Declaration, revision of the Convention, establishment of MAP Phase II, further implementation of MAP CAMP, start of the Blue Plan Mediterranean Observatory.
-

- difficulties in reaching integration within individual CAMP projects at the national/local levels, due to overlapping of competencies, sometimes due to reluctance to accept coordination and integration, and/or due to absence or inadequacy of relevant national legal base;
- need to assess the existing institutional and human capabilities of the local and national institutions involved, and to adjust the initial phase to that level, securing their gradual upgrading by on-site and on-the-job training;
- insufficient funds allocated to the ICM component and MAP CAMP.

3.5.3. Funding

Although it was clear that the refocusing on ICM and the envisaged increase in the number of ICM projects requires additional funds, the

1989 recommendation of the Executive Director of UNEP related to a gradual increase of the MAP budget was not accepted by the CPs. In addition, due to the general economic situation prevailing in the region, since 1991 the 'zero growth principle' of the MAP budget had to be applied, resulting in a real decrease of the budget as consequence of the depreciation of the US\$. Therefore, both the Blue Plan and PAP were seeking additional external funding, not always successfully. The funding problem was further aggravated by the fact that in some years the funds approved were either not fully disbursed or the disbursements were belated. The consequence was the loss of impetus and postponements or canceling of some activities.

3.5.4. *The main achievements*

Evaluating the main achievements it should be repeated that MAP, as a component of the UNEP Regional Seas Programme has been conceived and established primarily as a programme for the protection of the marine environment of the Mediterranean basin. Its ICM component, formulated as 'Integrated Planning and Management (IPM) of the Mediterranean environment and resources' and defined as the 'crucial MAP component' in the MAP 1975 document, has been introduced gradually, only to be fully recognized after 1990 within the context of sustainable development. Having the above in mind, the main MAP achievements in ICM might be summarized as follows.

3.5.4.1. *Initiation/strengthening of the ICM process in the region.* A long-term oriented ICM programme has been initiated and established at regional, national and local levels. A number of projects were or are being implemented with the involvement of dozens of national and local institutions and authorities, and hundreds of international, national and local experts. Even sub-regional distribution of the projects and the 'do-it-yourself' principle, with external assistance provided, contributed greatly to the affirmation of and interest for ICM in the region.

3.5.4.2. *Data, information and knowledge.* Data, information and knowledge on E/D interrelation, regional and local perspectives and on ICM methodology were enlarged and deepened, as result of the activities not only within the IPM component, but by all MAP components.

3.5.4.3. *Methodology, tools and techniques.* The methodology, tools and techniques for ICM were identified, developed, adapted to Mediterranean conditions and applied in practice.

3.5.4.4. *Cooperation.* Cooperation with the relevant UN agencies, international organizations and institutions was established and implemented successfully on ICM-related issues. This cooperation resulted in better use of the resources available, and the exchange of information and the transfer of knowledge on both inter- and intra-regional levels.

3.5.4.5. *Practical results.* The activities of both IPM components, the Blue Plan and PAP, as well as the MAP CAMP resulted in many practical results. Mention should be made of sectoral and integrated documents providing technical, planning and management solutions and measures, as well as proposals and recommendations for immediate, mid-term and long-term actions. Out of three MAP CAMP projects completed so far, the follow up of one of them (The Kastela Bay) resulted in the design and investment project for the sewerage, treatment and disposal system for the project area, now in partial implementation. In the second project area, the Syrian coast, the prepared Coastal Resources Management Plan was adopted by the government and is now used as base for development and management related decisions. The follow up expected in the Rhodes project, to be completed in June 1996, includes: (1) investment projects for the water supply system; (2) liquid waste management; (3) further development of sustainable tourism; (4) establishment of a number of SPAs; (5) installation of wind generators and solar collectors; (6) preparation of an Integrated Master Plan for the island; and (7) preparation of an Urgent Investment Portfolio. Similar results are expected within the Albanian project, to be completed by the end of 1996. The prospective studies and E/D scenarios prepared by the Blue Plan for each project area represented a precious base for the formulation of national or coastal development and/or management plans and policies.

3.5.4.6. *Replicability and pilot character.* The activities implemented are characterized by satisfactory replicability and their pilot character is evident. Furthermore, the set of selected project areas represent a good mix of situations and conditions specific for the region. Finally the experiences and results achieved were successfully applied in other regions, taking into account their specific conditions.

3.5.4.7. *Upgraded MAP capacities in ICM.* During the implementation of the above referred activities, MAP gradually adapted a better structure, organization and capacities with respect to the involvement in ICM. Also, regional networks were established including national and local authorities and institutions, experts and managers, strengthening the overall MAP capacity in ICM. This was followed by an intensified and wider cooperation with ICM relevant UN agencies and international organizations. PAP for example is now involved in large ICM projects in the Eastern and in the Western African regions, implemented with UNEP and FAO, as well as in training activities outside the Mediterranean region.

3.5.5. *Main weak points and deficiencies*

The following might be considered as main weak points and/or deficiencies of the implementation of ICM-related activities of MAP since 1995:

1. *Inconsistent or incomplete application of ICM methodology, tools and techniques.* Due to conceptual and programmatic reasons and limited funding, important elements of the ICM process and/or tools were not, or could not be applied in MAP ICM activities, such as: (1) networking; (2) activities related to involvement of the general public, NGOs and coastal stakeholders including the private sector; and (3) implementation of important ICM tools, for example economic instruments for ICM, conflict resolution techniques, carrying capacity assessment.
2. *Weak impact on integration of coastal related decision making, planning and management.* Such impact was unfortunately far from satisfactory and/or needed. Considering the integration as the first prerequisite for successful ICM, the following causes for such a weak impact might be emphasized: (1) the content of MAP CAMP projects was better adapted to the need for integration only at the end of the period; (2) the absence of some ICM components, cited above, in the content of the projects; (3) absence of national/local experience, practice, institutional and legal forms favoring integration; and (4) the usual conflicts of competencies and interests among various sectoral authorities at national and other levels and reluctance of various sectors/levels toward harmonization and integration. Future activities and programmes will have to take the above causes into consideration.

3. *Absence in CAMP projects of the legislative component.* The activities oriented at analyzing and improving the national legislation relevant for the protection of the marine and coastal environment and resources, apart from those related to Protocols, were rather rare during the entire period. As a consequence there were no legislation-related ICM activities in MAP CAMP. Such an activity within individual projects or at the regional level might have contributed to the initiation or strengthening of the ICM process in individual countries and indirectly to the integration of decision making and of policies.
4. *Absence in CAMP projects of an activity related to the direct involvement of NGOs and coastal stakeholders, including the private sector.* This absence influenced: (1) the quality of contribution in ideas and proposals from the local counterpart, thus affecting the quality of the exercise and the results produced; (2) the degree of support for the implementation of the project and implementation of its results; (3) the quality of communication with the general public through NGOs; (4) the solutions to, or the minimization of conflicts among various interested groups.
5. *Absence in CAMP projects of a professional activity related to the raising of public awareness on the need for and benefits from ICM and MAP CAMP.* The consequences were the same as those stated above.
6. *Weak provisions in CAMP agreements for the monitoring of the follow up of projects and for relevant obligations of local and national counterparts,* with consequences on the follow up and the implementation of the project results. These elements in future should be better defined in relevant Agreements.
7. *Insufficient involvement of ministries other than those responsible for environment.* Due to the fact that in almost all of the CPs' governments the ministries responsible for the environment are also those responsible for MAP, and due to absence of proper networking and more appropriate forms of projects management, important and influential ministries, such as those responsible for economic development, industry, tourism, energy, public works, finance, etc. were not adequately or not at all involved in MAP ICM activities. This resulted in weak integration and implementation of the projects results.
8. *Consequences of insufficient funding and/or belated provision of approved funds.* These consequences were: (1) limitation or absence of activities relevant for the ICM process, most of them

already cited; (2) postponements of the start of individual projects; and (3) longer implementation periods than technically needed. All these resulted in a loss of credibility, impetus and interest for the projects.

Awareness on and understanding of the above deficiencies was gradually growing both within MAP structures and the authorities involved. Most of them, but not all and in some cases not enough, were dealt with during the next MAP phase—the post-Rio activities oriented at the revision of the Convention and establishment of MAP Phase II.

4. POST-RIO INITIATIVES

In 1991 after several expert meetings, MAP prepared a document to be presented at the Rio UNCED. Representatives of MAP actively participated at the Conference.

Taking into account the documents adopted in Rio and following the unanimous orientation of the CPs to create conditions for their implementation in the region, the VIII OM of the CPs, held in 1993 in Antalya (Turkey) adopted a number of post-Rio related decisions:

- to initiate the process for the revision of the Barcelona Convention;
- a proposal to be prepared for the reorientation of MAP activities towards sustainable development and IPM of coastal resources, in accordance with the Rio documents;
- a Mediterranean Conference on sustainable development to be organized in 1994 in Tunis;
- to further strengthen and develop the cooperation with NGOs.

The overall objective of these initiatives was to develop and implement a regional approach for the implementation of the Rio documents and to ensure further refocusing of the MAP Programme towards environmentally sound integrated planning and management of the Mediterranean Basin.

In addition, the MAP legislative component was gradually strengthened. Up to the end of 1993 compilation of environmental legislation was prepared for five countries, however, the activity could not be continued due to lack of resources. Within the CAMP project for Fuka

(Egypt) a study on environmental legislation relevant for the implementation of the project has been prepared. The need for strengthening the environmental component, to be aimed at promoting the management of legal issues and assistance to countries, has been generally accepted.

During 1994 consultations were organized with a number of NGOs, resulting in a document on strengthened cooperation, presented later on at the IX OM of the CPs.

Again in 1994 at a UNEP/GEF (Global Environment Facility) meeting in Nairobi, MAP presented a proposal for priority fields for the GEF Mediterranean programme: (1) assesment of biodiversity; (2) management of marine ecosystems; (3) ICM in the region; and (4) implementation of activities related to mitigation of land-based sources of pollution.

Finally, after several preparatory meetings, the Conference on Sustainable Development in the Mediterranean was held in November 1994 in Tunis with the participation of ministers responsible for the environment from all Mediterranean countries and the Commissioner of the EU responsible for environmental issues. The Tunis Conference adopted the following documents:

- the Tunis Declaration on Sustainable Development in the Mediterranean;
- the Mediterranean Agenda 21 (as a draft document);
- the Resolution on Establishment of the Mediterranean Commission on Sustainable Development; and
- the Resolution on use of Land Policy tools for the conservation of Mediterranean Coastal Areas.

Basic data on Tunis documents are presented in Table 12.

After the Tunis Conference, in cooperation with the representatives of the CPs, MAP organized concerted activities oriented at the formulation of proposals related to the implementation of the decisions adopted in Antalya and Tunis, to be presented at the IX OM of the CPs, convened for 1995 in Barcelona.

During the same period the Blue Plan initiated the activities oriented at the establishment of the Mediterranean Observatory (MEDO) function. Missions in five countries were organized to assist local and national teams in establishing that function and a set of MEDO documents was prepared.¹³ In the meantime PAP completed a number of ICM-related Guidelines.¹⁴⁻¹⁶ PAP also continued its involvement in

TABLE 12
Tunis 1994 documents

Tunis Declaration on Sustainable Development in the Mediterranean Basin:

Adopted by the ministers in charge of the environment in the Mediterranean countries and the member of the European Commission responsible of the environment. The signatories committed themselves to, *inter alia*:

- promoting consideration of sustainable development when devising and implementing national and local development policies;
- working to mobilize the necessary resources and means for sustainable development;
- developing bilateral, regional and multilateral actions;
- encouraging partnership and co-development initiatives to strengthen national capacities for implementing sustainable development;
- investigating the measures best suited to the objectives of sustainable development and making necessary institutional arrangements.

Agenda 21 for the Mediterranean:

Adopted as a draft document to be further developed and finalized by MAP. The document is a transposition and adaptation of the document UNCED Agenda 21 to the Mediterranean conditions and is aimed at creating a framework of debate and research for the objectives to be reached in the Mediterranean region in the perspective of the Agenda 21. The document is composed of four parts:

1. *Social and Economic Dimensions (seven chapters)*: elaborating objectives and activities to be implemented with regard, *inter alia*, to: International Cooperation for Sustainable Development, Combating Poverty, Demographic Dynamics and Sustainability, Integration of the Decision-Making Process, etc.
2. *Conservation and Management of Resources (14 chapters)*: Integrated Approach to Planning and Management of Land Resources, Managing Fragile Eco-systems, Protection of Marine and Coastal Areas, Integrated Approach to Water Resources Management.
3. *Strengthening the Role of Main Social Sectors (10 chapters)*: Role of NGOs, Role of Local Authorities, Role of Business and Industry, Scientific and Technological Community.
4. *Implementation (eight chapters)*: Promotion, Education, Training and Public Awareness, International Cooperation for Capacity Building, Information for Decision Making.

Declaration on Establishment of the Mediterranean Commission on Sustainable Development:

The Ministerial Conference recommended to the next Conference of the Contracting Parties to the Barcelona Convention, to be held in Barcelona in 1995, to establish within MAP a Mediterranean Commission on Sustainable Development with the basic objective to guide MAP and assist Mediterranean coastal states in the implementation of the UNCED Agenda 21 and MED Agenda 21.

CAMP projects and in cooperative projects related to integrated management of soil erosion processes, aquaculture and water resource management.

The post-Rio MAP activities contributed to a better understanding

of the role of ICM in the process towards sustainable development and environmental protection in the region and set grounds for relevant decisions to be adopted at the 1995 OM of the CPs.

5. THE REVISED BARCELONA CONVENTION AND MAP PHASE II

5.1. The main decisions of the IX Ordinary Meeting of the contracting parties

The MAP post-Rio activities were finalized at the IX OM of the CPs, held in Barcelona on 5–8 June 1995. Due to the character of its decisions, the Meeting was followed immediately by the Conference of Plenipotentiaries, authorized to adopt revisions of the Convention and Protocols. The Meeting:

- approved amendments to the Barcelona Convention, to the Dumping Protocol and the new Protocol concerning Specially Protected Areas and Biodiversity in the Mediterranean (thus superceding the old SPA Protocol), and recommended their adoption by the Conference of the Plenipotentiaries;
- adopted the Action Plan for the Protection of the Marine Environment and Sustainable Development of the Mediterranean (MAP Phase II Action Plan) and recommended its endorsement by the Conference of the Plenipotentiaries;
- adopted a document on Priority Fields of activities for the Environment and Development in the Mediterranean basin (1996–2005);
- adopted the Barcelona Resolution on the Environment and Sustainable Development in the Mediterranean basin;
- adopted a document on MAP cooperation with NGOs;
- approved a report on the establishment of a Mediterranean Commission on Sustainable Development;
- decided that MAP CAMP projects for Morocco, Algeria, Lebanon, Israel and Malta should be prepared, signed and started in 1996 upon receipt of contributions from some CPs;
- accepted the proposal of the government of Spain to establish a RAC for Clean Production in the region, to be wholly financed by Spain.

The Conference of the Plenipotentiaries, held on 9–10 June 1995,

adopted the revised Convention, Protocols and MAP Phase II Action Plan as recommended.^{17,18}

The above decisions represent indeed the basis for a new phase of MAP. This is valid also from the point of view of the MAP ICM component, which will be commented on in detail in the following articles of this section.

5.2. The revised Barcelona Convention

The amendments to the Convention, relevant for ICM, are as follows:

- the amended title of the Convention reads ‘Convention for the Protection of the Marine Environment **and the Coastal Region** of the Mediterranean’;
- the Preamble: ‘...fully aware of their responsibility to protect and **sustainably develop** this common heritage...’;
- the Preamble contains new indents, related to: (1) the hitherto contribution of MAP to sustainable development in the region; (2) results of UNCED; (3) decisions of the Genoa Declaration, Charter of Nicosia, Declaration of Cairo on Euro Mediterranean Cooperation, the Casablanca 1993 Conference and the Tunis 1994 Declaration on sustainable development in the Mediterranean;
- Geographical Coverage (Art. 1, para. 2): ‘...The application of the Convention may be **extended to coastal areas**, as defined by each CP...’; (Art. 1, para 3) ‘...Each Protocol may extend the geographical coverage to which that protocol applies..’;
- General Obligations (Art. 4): ‘...to pursue the **protection of the marine environment and natural resources as an integral part of the development process...**’; ‘... for the purpose of implementing the objectives of sustainable development, the Contracting Parties shall take into account the recommendations of the Mediterranean Commission on Sustainable Development, established within the framework of MAP..’; ‘... to apply the precautionary principle, the polluter pays principle, undertake EIA...’; ‘...**commit themselves to promote the integrated management of the coastal zones, taking into account the protection of areas of ecological and landscape interest and the rational use of natural resources.**’;
- regarding environmental legislation (Art. 14): ‘...the Secretariat to assist Parties in drafting of environmental legislation in compliance with the Convention and the Protocols...’;

- new Art. 15 on Public Information and Participation: ‘...to provide access to information, to **ensure that the opportunity is given to the public in decision making process relevant to the application of the Convention and the Protocols...**’;
- Observers (new Art. 20): ‘...**to admit as observers** at meetings and conferences, if decided so by the CPs, any State not a Party or any IGO or NGO, the activities of which are related to the Convention.’

The above amendments are of crucial importance for the implementation of ICM within MAP in the future; detailed comments are given in later sections.

5.3. MAP Phase II Action Plan

The full title of this document reads: ‘Action Plan for the Protection of the Marine Environment and Sustainable Development of the Coastal Areas of the Mediterranean (MAP PHASE II)’. The summarized content of the document is presented in Table 13.

The main ICM relevant statements and provisions of the document may be presented as follows:

5.3.1. Introduction

‘Major shortcomings in the protection of the Mediterranean environment and its coastal region are the inappropriate management of the coastal zone due to the lack of adequate coastal zone planning and management; inadequate national legislation and its effective enforcement; weak institutional structures and inadequate human resources allocated for these types of activities; and lack of mobilization of adequate financial resources and clear political commitments to solve the existing problems.’

A very important and correct statement, clearly indicating the main ICM-related problems; in section 5.5 the MAP Phase II will be analyzed, beginning with this statement.

5.3.2. Objectives

‘...to ensure sustainable development of marine and land resources...integrate environment in socio-economic development and land-use policies...protect natural landscapes, sites of ecological or cultural value... strengthen solidarity in management of the

TABLE 13
MAP Phase II Action Plan, summarized contents

Preamble: Introduction; Objectives; Implementation

I. SUSTAINABLE DEVELOPMENT IN THE MEDITERRANEAN

1. Integrating Environment and Development

1.1. Economic Activities and the Environment (individual sub chapters dedicated to agriculture, industry, energy, tourism, transport)

1.2. Urban Management and the Environment

1.3. Sustainable Management of Natural Resources (individual sub chapters dedicated to water resources, soil, forest and plant coverage, living marine resources)

1.4. Integrated Coastal Areas Management

1.5. Elements for a Mediterranean Strategy

2. Conservation of Nature, Landscape and Sites

(Individual chapters dedicated to: data collection and assessment of the situation; legal measures; planning and management; public awareness and participation; exchange of experience and strengthening of capacities)

3. Assessment, Prevention and Elimination of Marine Pollution

(Individual chapters dedicated to: assessment of pollution related problems; pollution prevention from land based sources, sea bed activities, transboundary movements of hazardous wastes; supporting measures)

4. Information and Participation

(Objectives and actions defined)

II. STRENGTHENING OF THE LEGAL FRAMEWORK

(Legal basis and actions defined)

III. INSTITUTIONAL AND FINANCIAL ARRANGEMENTS

1. Institutional arrangements

2. Financial arrangements

common heritage and resources for the benefit of present and future generations...to contribute to the quality of life...'

5.3.3. Implementation

Inter alia:

'...the CPs will involve local, provincial and regional authorities in formulation and implementation of MAP Phase II activities... will **associate** in the MAP Phase II activities NGOs and organizations representing economic activities....particular attention will be given to the introduction of economic instruments for integrated resource management and to rigorous planning of coastal zones and management of natural resources....'

Note the difference in approach to the involvement of authorities and of NGOs and the economic sector!

5.3.4. *Sustainable development in the Mediterranean*

A number of objectives and activities to be implemented are presented in the accordance with the provisions of the Agenda 21 and the MED Agenda 21. Some of them, of particular relevance for ICM, will be cited:

5.3.4.1. *Integrating environment and development.* ‘...the complex interactions between environmental and socio-economic components requires integration of environmental policies into development policies...’

5.3.4.2. *Economic activities and the environment.* Major objectives related to sustainable development include:

- agriculture: ‘...rational methods of use of water resources’;
- industry: ‘...use of clean technologies...transfer, adaptation and control of technology...’;
- energy: ‘...use of new and renewable energy sources...ensure that new power stations to be built in the region be environmentally friendly and modernize the existing ones...’;
- tourism: ‘...assess, monitor and evaluate tourism activities and their impacts on environment, monitor tourism resources, undertake EIA and Carrying Capacity Assessments...’.

5.3.4.3. *Urban management and environment.* ‘create institutional framework for sustainable management of built up areas...urban planning to take environmental issues into account involve all actors concerned....mobilize international resources for formulation and implementation of strategies for urban environment...’

5.3.4.4. *Sustainable use of resources*

- water resources: ‘...preparation of water resource master plans on a basin basis...making use of integrated approach...develop national legislation for implementation of integrated management of water resources...’;

- soil: ‘...development of policies, strategies and programmes to prevent soil loss and desertification, to include mapping, monitoring and protection measures...’ (in cooperation with FAO);
- living marine resources: ‘...develop common resource management policies inspired by the precautionary principle...promote environmentally friendly aquaculture...’;
- forests and plant coverage: ‘...assessment of the state, identification of problems and priorities, drawing up of national Forest Directory Plans...’.

5.3.4.5. *Integrated Coastal Areas Management.* ‘...ICM requires understanding of the links between coastal resources, their use and the mutual impact of development and environment..’

Objectives are: preservation of biodiversity, resolving of competition between coastal activities, preservation of ecosystems; control of population pressure on and use of resources; achievement of environmental and economic objectives at a cost acceptable to society; prevention and reduction of pollution; public participation; development of institutional and human capacities.

‘...ICM to become gradually the standard approach to problems affecting coastal areas...relevant legislation to be enacted... institutional capabilities strengthened...appropriate tools and instruments to be developed and implemented: remote sensing, GIS, systemic and prospective analysis, EIA, economic instruments...’

Legislation: to encourage protection of a large percentage of the coastal strip, prevent continuous urbanization and industrialization of the coastline, to ensure compatible use of the coast.

At the regional level: to elaborate jointly the most appropriate planning methodology, provide training, information, and transfer of knowledge, promote international cooperation, etc.

5.3.4.6. *Elements of a Mediterranean strategy.* The strategy aims to promote and develop the observatory function of the interactions of environment and development:

- at the national level: ‘...establish interministerial structures such as commissions on sustainable development aimed at integration of the development policies making process...’;
- capacity building: for designing and implementation of sustainable development strategies, for management of public

services associated with the environment, for management of enterprises having impact on environment, etc.

5.3.5. *Conservation of nature, landscape and sites*

‘...In the Mediterranean, examples of coastal management which have the protection of nature, landscape and sites as their objective are still very rare or geographically limited...’

This chapter contains a set of objectives and activities related to: the collection of data and assessment of the situation; legal measures; planning and management; public awareness and participation; exchange of experience and upgrading of national capacities. The concept of the chapter is based on the new Protocol on SPA and Biodiversity. Only few provisions will be cited: ‘...forms of active management are necessary...’; ‘...the encouragement of active public participation in the conservation and management of protected sites, and endangered species...’; ‘...without public support the nature protection and conservation measures cannot achieve commensurate results...’.

5.3.6. *Assessment, prevention and elimination of marine pollution*

A comprehensive and detailed chapter, presenting objectives and activities to be implemented at regional and national levels, related to: assessment of pollution related problems; pollution prevention from relevant sources and activities; preparedness for and control in case of accidental marine pollution; support measures.

5.3.7. *Information and participation*

Objectives defined, *inter alia*: ‘...to mobilize and ensure the participation and involvement of major activities concerned...’; Actions needed: ‘...to launch educational programmes,...to ensure through the Coordinating Unit and RACs that all relevant IGOs and NGOs... actively participate in MAP activities accordingly...’.

5.3.8. *Strengthening of the legal framework*

‘...a new Protocol on hazardous wastes and amendments to the LBSP Protocol to be adopted; among activities to be implemented: ...developing further legal instruments in order to strengthen and consolidate the legal basis for Mediterranean cooperation...supporting the Mediterranean countries, in particular the developing ones, to develop and upgrade their environmental regulation related to the protection of environment and sustainable development...provide them technical assistance...’

5.3.9. *Institutional and financial arrangements*

In this chapter the relevant institutional and financial arrangements, defined in the MAP 1975 document, are slightly amended, the new element being the Mediterranean Commission on Sustainable Development, defined as a:

‘forum for open dialogue and consultation with all relevant parties on policies for promoting sustainable development in the Basin,...it advises on activity programmes and formulates recommendations for CPs.’

5.4. The Barcelona 1995 Resolution and document on priority fields of activities for the environment and development (1996–2005)

The Barcelona 1995 Resolution was adopted on 10 June 1995 by the Conference of the Plenipotentiaries. The Resolution confirms the adoption of MAP Phase II, decides on the setting up of the Mediterranean Commission on Sustainable Development and commits the governments of the CPs on a number of future activities. The main provisions of the Resolution are presented in Table 14.

The document on Priority Fields of Activities for the Environment and Development in the Mediterranean Basin (1996–2005) defines the thematic framework, objectives and priority fields of activities to be implemented by MAP in the next decade. The most relevant details of the document are presented in Table 15.

5.5. Other documents adopted

Among other documents adopted by the IX OM of the CPs, those related to the cooperation with NGOs and the proposed amendments of the LBSP protocol might be mentioned.

The document ‘MAP cooperation with NGOs’¹⁹ emphasizes the 1989 amendments of the Rules of Procedure, requesting ‘...the Executive Director...to invite any international NGO concerned to participate at MAP meetings or conferences...’. The document defines the procedure for the exchange of information with NGOs, the possibility that NGOs attend MAP meetings, giving to RACs ‘...a certain margin of manoeuvre with respect to their meetings...’. Finally, the document provides a list of 14 international NGOs and six more to be proposed later on by

TABLE 14
The Barcelona 1995 Resolution

Adopted by the ministers of environment of the Mediterranean countries and the member of the European Commission in charge of the environment. The main provisions of the Resolution, summarized, are:

1. The MAP Phase II adopted, with the following objectives: to integrate the environment in the overall development; to ensure sustainable development, bearing in mind the MED AGENDA 21; to conserve nature, sites and landscape; to prevent pollution of marine and coastal areas; to establish national enforcement and control mechanisms for the implementation; to strengthen cooperation with IGOs, UN agencies, enhance the support and involvement of NGOs and the public.
 2. Commitment for the implementation of MAP Phase II, of the revised Barcelona Convention, adoption of the Priority Fields of Activities (1996–2005).
 3. Decision to set up a Mediterranean Commission on Sustainable Development within MAP.
 4. A Protocol on Transboundary Movement of Hazardous Wastes and their Disposal to be prepared and adopted.
 5. Conservation of Biodiversity to be incorporated and integrated as an objective of economic development; urgently to reinforce actions aimed at conservation of species, habitats and sites of ecological value.
 6. Commitment to reduce/eliminate by the year 2005 the discharge of toxic, persistent and/or bioaccumulative substances.
 7. Promotion of transfer to clean technologies.
 8. Solidarity with population suffering from aggression and terrorism; rehabilitation programmes to be developed/implemented.
 9. Solidarity in case of natural disasters and/or major technical accidents.
 10. Additional funds to be mobilized for the implementation of MAP Phase II and Priority Fields of Activities.
 11. The results of MAP Phase II to be evaluated through monitoring of its implementation.
 12. The Mediterranean Commission on Sustainable Development to examine the feasibility of the creation of a fund for nature conservation and ICM related activities, thus assuring additional resources.
 13. Social and economic actors, communities, companies and NGOs invited to associate with the implementation of MAP Phase II; international organizations and financial and development programmes invited to participate and cooperate with MAP.
-

the southern Mediterranean states, entitled to be invited to general meetings, and a list of 43 NGOs which might be invited to meetings dedicated to particular issues.

Among amendments proposed for the LBSP protocol, the provision

TABLE 15

Priority Fields of Activities for the environment and development in the Mediterranean basin (1996–2005)

The IX OM of the CPs approved and the Conference of Plenipotentiaries adopted the document, taking into account the MED AGENDA 21. The Priority Fields of Activities were defined as follows (in a summarized presentation):

Integration of Environment and Development: national strategies for sustainable development to be formulated; instruments for the assessment of E/D interrelations to be developed and applied; framework and programme for an environmental health action plan to be developed.

Integrated Management of Natural Resources: Water Resource Management (seven activities envisaged and defined); soil management (three activities); fighting erosion and desertification (two activities); management of forests and plant cover (two activities); management of genetic resources (two activities); marine living resources (two activities).

Integrated Management of Coastal Areas: measures and techniques for ICM and coastal protection to be developed; national capabilities strengthened through training; programmes of management of coastal areas, particularly in pilot areas to be formulated and implemented.

Activities of Particular Importance for Environment Protection and Sustainable Development: waste management (six activities); agriculture (four activities); industry and energy (four activities); transport (three activities); tourism (rational management, diversification, development in respect of environment and cultural heritage); urban development and environment (three activities); information (development of methodology for applying the participatory approach in the sustainable development relevant decision making process at national and local levels; increase of flow of E/D relevant information; promotion of public awareness).

Assessment, Prevention and Control of Marine Pollution: assessment of inputs of pollutants from water courses, evaluation of major sources of pollution, of the quality of marine environment, activities oriented at reduction of pollution; guidelines on dumping of dredging spoils to be developed, preparedness and emergency response systems to be developed and established.

Conservation of Nature, Landscape and Sites: strategies for the protection of biodiversity, inventory and list of threatened species and of sites of natural and cultural value to be prepared, conservation and rational management of wetlands to be enhanced, establishment of national inspection mechanisms and of land use tools for the protection of coastal areas to be encouraged; action plans for the protection of monk seals, marine turtles and marine mammals to be implemented.

related to the geographical coverage is of interest for ICM—the geographical coverage is based on hydrologic basins, and the countries which are not CPs but are located in relevant hydrologic basins, may be invited to participate in the activities related to this Protocol.

5.6. MAP phase II: comments and objections

Summarizing the Barcelona 1995 documents, the following might be emphasized as major innovations with respect to the 1975 MAP documents, relevant in particular for ICM:

1. A new conceptual framework—sustainable development.
2. Geographical coverage—coastal and marine areas, watersheds.
3. Among major objectives, to integrate the environment into socio-economic development.
4. Commitments relevant for the ICM process:
 - ICM to gradually become the standard approach;
 - the most appropriate planning methodology, to be jointly adopted;
 - local, other authorities to be involved;
 - NGOs to be associated, to participate actively;
 - opportunity to be given to the public to participate in the decision making process;
 - legislation—assistance to be provided;
 - networks—to establish integrating structures;
 - the Mediterranean Commission on Sustainable Development to explore possibilities of additional funding for ICM;

The ICM role within Priority Fields of Action:

- ICM recognized as one of Priority Fields of Action;
- ICM—measures and techniques for environmental protection to be developed;
- five new CAMP projects to start in 1996 (providing donors' support is available);
- actions related to the management of water resources, soil, forests and plant coverage, energy, industrial activities to be implemented within an integrated approach;
- the E/D observatory function to be established and implemented;
- prospective scenarios to be further implemented;
- training for ICM to be implemented.

It may be noted that all major elements of the ICM process were in one or another way included in the MAP Phase II and that the relevant activities envisaged are more or less compatible with ICM principles and methodology. Furthermore, the concept, objectives and activities pertaining to other MAP components (monitoring and prevention of

pollution, emergency planning and capacity building, specially protected areas and biodiversity protection, historic settlements, etc.) are not only complementary to the ICM process, but also indispensable inputs. Considering the above, within the general context of MAP as an intergovernmental cooperation of a large number of coastal states, the 1995 documents provide a good legal, conceptual and programmatic base for further progress of ICM in the region. In comparison with the 1975–1976 documents the ICM position and role within MAP is now better identified and established, and the ICM-related priority actions are programmed and formulated in such a way as to assure intensive ICM-related activities within the next MAP decade.

Finally, several remarks should be expressed regarding the present conceptual approach and some other aspects.

5.6.1. *Consistency of the conceptual approach*

With respect to sustainable development as a general framework and integration of environment objectives into the socio-economic development, the next lower level framework for coastal areas cannot be other than ICM. Consequently, actions related to integrated management of coastal resources and activities cannot be dealt with in parallel, but inside the ICM. With regard to it, the 1993 Noordwijk World Coast Conference Statement²⁰ should be cited:

‘...ICM has been identified as the most appropriate process to address current and long term coastal management issues, including habitat loss, degradation of water quality...depletion of coastal resources. ICM is a mean to identify and anticipate future opportunities. Thus, ICM is a major tool for achieving sustainable development in coastal areas.’

A consistent application of such an approach might be left for the future, relying on the already stated commitment on ICM to gradually become the standard MAP Phase II approach.

5.6.2. *ICM to be promoted and introduced as a long term process*

Various ICM-related commitments and activities were not identified as coherent and consistent elements of the ICM process. Its long-term character and the obstacles when implementing it, pertaining to existing administrative, institutional and legal situations in each country, should be taken into account and the ICM-related activities, including CAMP projects should not only be oriented at achieving immediate outputs, but also be ICM process oriented.

5.6.3. *Integration*

Integration of policies, decision making, management, and the integration of environmental protection within the socio-economic development was recognized as an important objective. Despite this, the activities oriented at achieving such integration were neither emphasized enough nor practically defined. Besides the problems of horizontal and vertical integration at various site-specific or national levels, particular attention should to be dedicated to the problem of adequate integration within MAP, both on a general and CAMP levels.

5.6.4. *Islands*

Out of the 45 000 km of the total length of the Mediterranean coastline, 17 700 km, or 39% belongs to the islands. As is the case with most of the islands in the world, the Mediterranean islands (the medium-sized and small ones in particular) need a specific approach and urgent intervention. Therefore, the opportunity might be considered of introducing an islands-related programme of activities within the Priority Fields of Activities and future biennial workplans.

5.6.5. *Funding level*

The financial problems were identified as the major constraint in implementing the CPs' decisions. Furthermore, the new concept and programme envisaged a wider and deeper involvement of MAP towards environmental and resource protection and management, oriented at achieving a sustainable development. Therefore, donors were invited to contribute additional funds, in particular for the implementation of the new CAMP projects, but no new decisions with reference to the regular budget were adopted. This might mean that, at least for the time being, the 'zero growth budget' principle has not been abandoned. Consequently, unless additional funds can be secured, the implementation of the new concept and programme and the expected impacts on environmental protection and resource management in the region might be seriously affected.

6. PROSPECTIVE AND PROBLEMS

Due to general problems pertaining to the initiation of the ICM process and the specific problems related to the Mediterranean and MAP, the future involvement of MAP in ICM can be only a gradual one, requiring time, funds, perseverance and energy. The approach to ICM activities and CAMP projects has to be conceived on a country-by-country and site-specific basis, respecting the existing conditions,

institutional and legal arrangements and capacities. Programmes and activities have to be based on the present practice and level of coastal management in the respective areas, with gradual upgrading of human and institutional capacities through training and on-the-job training in particular. The objective of individual ICM activities should be the improvement of coastal management oriented at introducing the ICM process within the conditions given. Introducing specific activities related to ICM Networks and to the participation of coastal stakeholders, NGOs and the general public would greatly contribute to the initiation and later on to its permanent implementation. The existing coastal management practice contains, in almost all countries, all the essential elements of ICM, but in most cases is not integrated and/or not properly implemented. The present trends, related to the implementation of the Rio documents, are strongly supported by the governments of the Mediterranean countries and the EU, which is also evident in the adopted MAP Phase II documents. The need for a coastal specific approach and integration is generally recognized, as well as the potential benefits of applying ICM. Finally a number of most relevant ICM tools such as Environmental Impact Assessment (EIA), prospective studies, cost benefit analysis, economic instruments for ICM etc., are being implemented in many countries. Therefore, accepting verbally or not the ICM as a process containing an appropriate methodology and tools, the present practice of coastal management contains important triggering factors for its implementation.

Consequently, further MAP involvement in ICM should be based on identifying and evaluating the ICM elements present under site- or national-specific conditions and oriented at their gradual strengthening and integration within the ICM process, using as much as possible the existing infrastructure and capacities. In parallel a well conceived activity should be oriented at further development and adaptation of relevant E/D indicators, of ICM tools and methodology, applicable under various Mediterranean conditions. The activities within CAMP projects should be preceded by an in-depth analysis of existing conditions, of the legal and institutional framework and local and national human and institutional capacities relevant for ICM, and supported by intensive training and promotion programmes.

The approach presented above seems more realistic and feasible, than trying to adapt or improve the existing structures with regard to the needs of ICM, before tangible results and the needed critical momentum are attained. It might be expected that such a flexible and realistic ICM-related policy would be supported by the governments of the Mediterranean countries and by the EU in their role of the CPs,

and therefore the respective programmes to be conceived and formulated as an important part of MAP Phase II.

A Mediterranean Conference on ICM within the MAP framework, as the follow up to the 1994 Tunis Conference on Sustainable Development, might be an attractive and promising short-term objective. Such a Conference might contribute to a better understanding of the needs for and benefits of applying ICM in the region and might better define the role of ICM within MAP Phase II. In addition, such a Conference could recommend further ICM-related commitments of the CPs.

A medium-term objective for ICM within MAP Phase II might be the formulation and adoption of a new protocol on the implementation of ICM as a standard MAP Phase II practice. Such an initiative, as well as the basic principles and contents of the protocol could be discussed at the above proposed Conference, before the start of the regular procedure envisaged for the preparation and adoption of protocols.

Concluding this article, the main prerequisites for the implementation of immediate ICM activities envisaged by MAP Phase II may be listed:

- increased level of funding and regular disbursement of funds;
- recognition of the new role of ICM within the adopted concept and programme, not only by MAP structures but also by the new Mediterranean Commission on Sustainable Development;
- upgrading of MAP internal capacity for integration;
- adaptation of the contents of CAMP project agreements, in particular related to the strengthening of local and national counterparts' obligations related to the implementation of the projects' results and the follow up of the process;
- adapting the contents of CAMP projects to newly defined MAP objectives and Priority Fields of Activities.

Under the assumption that the new concept and programme will be implemented as envisaged and the prerequisites listed above fully met, MAP Phase II will be an important promoter of ICM and will contribute to reaching the critical momentum for the establishment of the ICM process throughout the Mediterranean region.

REFERENCES

1. Jeftic, L., Bernhard, M., Demetropoulos, A., Fernex, F., Gabrielides, G. P., Gasparovic, F., Halim, Y., Orhon, D. & Saliba, L. J., State of marine environment in the Mediterranean region. *MAP Technical Reports Series No. 28*, UNEP, Athens, 1989.
2. Grenon, M. & Batisse, M., *Futures of the Mediterranean Basin, The Blue Plan*. Oxford University Press, New York, 1989.

3. Koch-Weser, C., The World Bank: Address presented at the Conference of the Plenipotentiaries on the Barcelona Convention, Barcelona, 1995.
4. Belfiore, S. The role of the European Community in the Mediterranean coastal zone management. *Ocean & Coastal Management*, 31(2-3) (1995) 219-258.
5. The University of Rhode Island and The Center for the Environment (USAID), *Educating Coastal Managers*, Proceedings of the Rhode Island Workshop, ed. B. R. Crowford, J. S. Cobb & L. M. Chou. Coastal Resources Management Project, Coastal Resource Center, Rhode Island, USA, 1995.
6. UNEP, Coordinating Unit of the Mediterranean Action Plan, *Genoa Declaration on the Second Mediterranean Decade*. UNEP, Athens, 1988.
7. CEC, *Charter on the Euro Mediterranean Cooperation Concerning the Environment in the Mediterranean Basin*. CEC, Nicosia, 1990.
8. UNEP-MAP, *Refocusing of the Mediterranean Action Plan on Environmentally Sound Integrated Planning and Management of the Mediterranean Basin*. UNEP (OCA) MED IG.1/Inf.4, UNEP, Athens, 1989.
9. UNEP-MAP, *Mediterranean Action Plan and Convention for the Protection of the Mediterranean Sea Against Pollution and its Related Protocols*. UN, New York, 1992.
10. PAP/RAC-MAP, UNEP, *Compendium of PAP Technical Reports and Studies*. PAP/RAC, Split (Croatia), 1995.
11. PAP/RAC-MAP, UNEP, *A Common Methodological Framework for Integrated Planning and Management in Mediterranean Coastal Areas*. PAP-4.EM.5/2, PAP/RAC, Split (Croatia), 1988.
12. The Blue Plan RAC-MAP, UNEP, *Systemic and Prospective Analysis for Mediterranean Sustainable Development*. UNEP (OCA)/MED IG.5/Inf.5, UNEP, Athens, 1995.
13. The Blue Plan RAC-MAP, UNEP, *Observation and Evaluation of Environment and Development in the Mediterranean (Preparatory Phase)*. UNEP (OCA)/MED IG.5/Inf.5, UNEP, Athens, 1995.
14. UNEP-PAP/RAC, *Guidelines for Integrated Management of Coastal and Marine Areas, with Special Reference to the Mediterranean Basin*. UNEP Regional Seas Reports Series No. 161, PAP/RAC, Split (Croatia), 1995.
15. PAP/RAC-MAP, UNEP, *Guidelines for Conservation and Rehabilitation of Mediterranean Historic Settlements*, Vol. I/II. PAP/RAC, Split (Croatia), 1995.
16. PAP/RAC-MAP, UNEP, *Guidelines on Application of a Common Consolidated Methodology for Mapping of Rainfall Induced Erosion Processes in Mediterranean Coastal Areas (in Cooperation with FAO)*. PAP/RAC, Split (Croatia), 1996 (draft).
17. UNEP-MAP, *Report of the IX Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution*. UNEP (OCA)/MED IG.5/16, UNEP, Athens, 1995.
18. UNEP-MAP, *Mediterranean Action Plan Phase II and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols*. Informal document, UNEP, MAP, Athens, 1995.

19. MAP-UNEP, MAP, *Cooperation with Non-Governmental Organizations (NGOs)*. UNEP(OCA)/MED IG.5/11, UNEP, Athens, 1995.
20. Beudenkamp, P., Günther, P., Klein, R., Misdrop, R., Sadacharan, D. & de Vrees, L. (ed.), *World Coast Conference 1993 Proceedings*, The Hague, Coastal Zone Management Center, The Netherlands, National Institute for Coastal and Marine Management, RIKZ-III. CZM Centre Publ. No. 4, 1994, pp. 25–28.