

The List of Specially Protected Areas of Mediterranean Importance: Implementation and Perspectives for Development

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Contents

1. Executive summary	p.	2
2. Introduction		3
3. Recommended orientations and approaches		5
a. Benefits of MPA networks		5
b. Scientific criteria must be used to select networks components		7
c. SPAMIs should be possibly linked with Integrated Coastal and Marine Management		8
d. The issue of governance		9
4. The current situation		11
a. Requirements for the SPAMIs deriving from the provisions of the Protocol		11
b. The current status of the SPAMI List		12
5. Proposed implementation actions		14
a. Improving the functionality of the existing SPAMIs		14
b. Ensuring the harmonic growth of the SPAMI system		15

1. Executive Summary

Extraordinary advantages can derive to marine and coastal conservation from the establishment of a functional network of marine protected areas. The Mediterranean Sea is endowed with a very innovative legal framework, provided by the SPA Protocol, which contemplates the establishment of a special list of protected areas known as the SPAMI List. However, merely accruing protected areas to the List will not, per se, create a network. For such a feat to be achieved, a delicate but worthwhile process will have to be undertaken by the Parties with determination and conviction.

This document first describes orientation and approaches for such task. The first section includes discussions of the advantages of networks of MPAs as opposed to assemblages of unconnected MPAs, the ways in which networks should be designed, the need of identifying gaps, using scientific criteria, and adopting an ecosystem approach, the need of addressing the issue of governance and of establishing a link between the SPAMI system and integrated coastal zone management. The second section of the document describes the current situation of the SPAMI system, and provides a brief summary of the requirements for SPAMIs deriving from the provisions of the Protocol. Finally, the document suggests a number of implementation actions aimed at the improvement of the functionality of the established SPAMIs, and to the achievement of the future harmonic growth of the system into a full-fledged, effective regional network of MPAs.

2. Introduction

With the establishment in 2001 of a first nucleus of twelve SPAMIs, the foundation was laid by the Contracting Parties to the Barcelona Convention for the creation of a Mediterranean network of marine protected areas (MPAs). By adopting the new Protocol on Specially Protected Areas in 1995, thus implementing a very innovative legal framework now providing a model for regional marine conservation worldwide, the Parties decided to undertake a process likely to have far-reaching consequences for marine conservation in the Mediterranean region.

The major elements of innovation of the SPAMI system include, among others, the possibility of establishing MPAs in the Mediterranean high seas; a legal framework by virtue of which all Parties to the Protocol are bound by the regulations set forth for each of the SPAMIs, either in national waters, or in the high seas; the framework for the establishment of transboundary MPAs; finally, the initiation of a process which may lead, if carefully steered, to the creation of a network of protected areas in the Mediterranean region.

The need of organizing MPAs into networks, as explained in greater detail further on in this document, was recently emphasized at the World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002. WSSD adopted an action plan that called on Governments to establish worldwide representative networks of MPAs by the year 2012, as well as to protect marine biodiversity on the high seas. The contribution to conservation and sustainable use of representative networks of protected areas was also recalled in the 'state of the art' report of the *ad hoc* Expert Committee of CBD SBSTTA 8, listing recommendations to be transmitted for consideration to the next CBD Conference of Parties (March 2004). In particular, recognizing the urgent need for the establishment of protected areas beyond national jurisdiction, SBSTTA 8 recommended that the CoP call for the Executive Secretary to work with other international and regional bodies, including regional seas conventions and action plans, with the specific aim of identifying appropriate mechanisms for establishing and effectively managing marine and coastal protected areas beyond national jurisdiction. In this specific effort the contribution of the Mediterranean Action Plan is particularly relevant, given the provision in the Protocol for the establishment of protected areas in the Mediterranean high seas.

Quite significantly, the Mediterranean Action Plan has been at the forefront of this now mainstream approach, and has set up with considerable advance the legal framework and the necessary institutional support for the establishment of a regional network of MPAs. However, for such a network to come into existence and function, the remaining task ahead still remains an arduous challenge. First, for a network to be functional, all individual MPAs must be efficient and smoothly running machines, given that every

chain is as weak as its weakest link. Second, the mechanism for incorporating new MPAs in the List needs to be adjusted to account for the need of accruing to the network new elements to increase ecological and geographic representativeness and balance.

Although transforming such an extraordinary opportunity into success will be a considerable challenge, such challenge may be well worth facing given the well-recognised advantages of MPA networks. In such a delicate and important effort, the natural actor and facilitator here envisaged is the RAC/SPA.

3. Recommended orientations and approaches

This section first presents a summary of the evidence that has been recently assembled to support the creation of networks of MPAs as opposed to simple assemblages of single MPAs; it then discusses the scientific criteria by which the MPA elements of a representative regional network should be selected, and the opportunity of adopting an ecosystem approach in network design; it further discusses the opportunity of integrating the SPAMI network within a wider coastal and marine management regime, and, finally, emphasizes the need of addressing the issue of governance.

a. Benefits of MPA networks.

Networks of MPAs are considered today very effective tools for conserving ecosystems over wide areas, possibly encompassing entire regions. There is a clear difference between systems and networks of MPAs; while the former is a loose term used to describe the way things are organised within a group of MPAs, the latter specifically refers to a group of MPAs that are linked in a physical, ecological and/or institutional sense¹.

Such networks can succeed in protecting what is ecologically most critical at a regional scale, whereas even large-scale multiple use MPAs may be insufficient to achieve this. Networks present little opportunity cost resulting from restrictions of use in any one locality, since these restrictions are equitably spread out over a much wider area; therefore, the benefits deriving from the use of strategic and well-designed networks of MPAs can be enormous, and can also spread across whole ecosystems or even ocean regions².

To function as a network, a group of MPAs must be linked in an ecologically meaningful way, because fundamental principles of ecology and biological oceanography underlie the way networks are constructed. Wisely designed networks may have major consequences in the protection of both species and habitats. Most marine species have small, highly dispersed larvae or propagules that drift in the water column. Thus, the reproduction of marine organisms is typically separated from their recruitment. Given that it is rarely known where the sources and sinks of the larvae/propagules of a single species are, and that even if one could provide the optimum design for one species, other species would have different requirements, one of the primary purposes of a network is to maximize the variety of connections between MPAs, and thus optimise

¹ Agardy T., Wilkinson T. 2003. Conceptualizing a system of protected area networks for North America. Fifth International SAMPAA Conference, Victoria (B.C., Canada, 11-16 May 2003.

² Agardy T., Engdahl S., In press. Marine protected area networks and corridor approaches: optimal ways to conserve ecosystem integrity. Conservation International, Washington D.C.

benefits. A network of MPAs can also protect representative samples of the different habitats found within a region. While individual MPAs, particularly in the Mediterranean region where these are usually small, can protect a limited amount of habitats, a well-designed network can protect all of them: onshore and offshore, shallow banks and deep channels, islands, estuaries, and rocky, sandy, and muddy substrates. Only if linked together in a network, MPAs can protect such a variety of habitats and cover the geographic range of broad ecological processes, such as upwellings and sediment outflows.

Recent studies have shown that even very small marine reserves can have significant positive impact on marine biodiversity and productivity³. However, small marine protected areas that are linked in a systematic network that protects a large proportion of critical habitats, or particularly important sources of recruits in a region, provide even greater benefits. Source/sink modelling can be employed to determine the relative value of various sites within a single marine protected area^{4, 5}, and studies of connectivity of this type are also important in the development of networks of MPAs, as proposed for the northwest Caribbean⁶. Networks can also help to link marine areas with adjacent land areas and their protected area networks. The impacts of land-based activity on even offshore MPAs can be significant, especially for issues like maintaining water quality. Establishing an effective link with land management is essential to conserving marine resources, and networks can help make this connection⁷ (see further in section 3.c). Furthermore, networks allow scientists to use MPAs more effectively for research, providing opportunities for replication, where research in similar habitats in the same region "would increase the precision for all types of data and enable statistically valid conclusions"⁸.

MPA networks also provide considerable management advantages. They share and enhance many of the benefits of individual MPAs, providing opportunities to preserve marine biodiversity, resolve user conflicts, and restore degraded or overexploited areas⁹. Well-designed networks of MPAs can make overfishing a regional population or stock more difficult, where protecting a single area of sufficient size to provide equivalent protection might not be feasible or may be politically unpalatable¹⁰. Furthermore,

³ for an example, see Russ, G.R., Alcala, A.C. 1999. Management histories of Sumilon and Apo Marine Reserves, Philippines, and their influence on national marine resource policy. *Coral Reefs* 18:307-319.

⁴ James, M.K., Dight, I., Day, J.C. 1995. Understanding larval dispersal and habitat connectivity in tropical marine systems; a tool for management. [In] T. Agardy (ed.) *The Science of Conservation in the Coastal Zone*. IUCN, Gland Switzerland: 41-46.

⁵ Bohnsack, J. 1996. Marine reserves, zoning, and the future of fishery management. *Fisheries* 21(9):14-16.

⁶ Roberts, C. 1998. Sources, sinks, and the design of marine networks. *Fisheries* 23(7):16-19.

⁷ Barr, B.W. 2000. Establishing effective marine protected area networks. *Science and Management of Protected Areas Association 4th International Conference*. University of Waterloo, Ontario, Canada. May 14-19, 2000.

⁸ Ballantine, W. 1991. Marine Reserves -- The Need for Networks. *New Zealand Journal of Marine and Freshwater Research* 25:115-116.

⁹ Agardy, T. 1999. Creating havens for marine life. *Issues in Science and Technology* 16(1):37-44.

¹⁰ Agardy 1999, op. cit.

networks offer to MPA managers an extraordinary opportunity for sharing efforts, resources and experiences in the institutional, administrative, scientific¹¹, educational and socio-economic domains. From a practical perspective, MPA networks can increase the pool of available financial and personnel resources to address issues and problems common to more than one site. Within networks, common issues and concerns can be easily identified. Pooled resources and a shared agenda for action promote swift and effective responses to shared problems¹². Collective and collaborative actions in outreach and education can mobilize support for individual sites and the concept of marine protected areas generally. The shared experiences of site managers and agency administrators can be critical to avoid duplication of effort when a site in the network encounters situations that others have already resolved. Overall, the benefits that networks of MPAs can provide in comparison to a sum of unconnected reserves are staggering. Opportunities for MPA managers, scientists, and educators to share experiences, look for partners in regional initiatives, and pass on the latest advance or innovation in their discipline, all provide tangible benefits to MPA practitioners involved in regional, national or international networks¹³.

b. Scientific criteria must be used to select network components

The overarching goal of a network of MPAs intended to protect marine biodiversity is to secure the rich and valuable marine and coastal ecosystems of a particular region, by focusing conservation action on the most ecologically critical places. The growth of such network should therefore, insofar as possible, keep into account fundamental principles of ecology and biological oceanography. Larval and propagule dispersal and recruitment in marine ecosystems occurs over a scale that is orders of magnitude greater than on land, and is also a highly variable process, subject to stochasticity and non-linear dynamics. If properly designed, even small marine protected areas can provide tremendous conservation benefits throughout a region, providing that they are linked together in a systematic network that protects a large proportion of critical habitats and particularly important sources of recruits.

The selection of new MPAs as components of the network then becomes a critical process. In the past, and in part still currently, the choice of a marine or coastal area to be protected in the Mediterranean rests on criteria that do not take into account those specific characteristics that will actively contribute to the efficiency of a network. Typically, choice criteria are based on the presence of rare or emblematic species, or of

¹¹ See <http://www.icram.org/afrodite/summary.htm>

¹² Dyer, M. and M. Holland. 1991. The Biosphere Reserve concept: needs for a network design. *BioScience* 41(5):319-325.

¹³ Barr, B.W. 2000. Establishing effective marine protected area networks. *Science and Management of Protected Areas Association 4th International Conference*. University of Waterloo. Ontario, Canada. May 14-19, 2000.

particularly valuable seascapes or landscapes, such as rocky cliffs¹⁴. As Boero *et al.* (ref. in previous footnote) noted, “This mode of selection has been operating for several years in Mediterranean areas and it is now time to question its efficiency and to correct the mistakes, if any, of the past. This should ultimately lead to a better design and management of existing and future MPAs”; and, even more importantly, of MPA networks. To perform such task, however, knowledge of the biology and ecology of the species and communities to be protected is necessary. Preserving a high-diversity spot without managing its sources may lead to serious dysfunction, since the non-preserved source sites will soon cease to provide propagule/larvae supplies, leading to the extinction of the local populations which make up the high-diversity spot (ref. in footnote n. 11).

Such desirable approach in the choice and design of new MPAs, by refraining from considering the management and conservation of single species, takes into account the complexity of interrelationships of marine organisms, and is best known as “ecosystem approach”. Because of the highly connected nature of the marine environment, in which substances and forcing factors are efficiently transmitted across wide spaces, a MPA will rarely succeed unless it is embedded in, or is so large that it constitutes, a greater ecosystem management regime. Such concept, recognised in Decision V/6 of the Conference of Parties to the Convention on Biological Diversity, adopted in 2000, sets out in detail the principles behind the ecosystem approach: (a) the ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way, and (b) the intention is to reach a balance of the three objectives of the Convention on Biological Diversity: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Such notion was further emphasized by the FAO “Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem” of 2001¹⁵, and later by the Johannesburg Summit of 2002, which instructed States to encourage the application by 2010 of the ecosystem approach. And, as clearly discussed by S. Palumbi, networks of MPAs are currently the best-understood means for managing marine ecosystems, and an effective tool for restoring and maintaining coastal and marine habitats¹⁶. “Given this state of knowledge, we can be fairly certain that reserves set up in major marine habitats will serve a critical conservation need, preserving habitats and ecosystems that house thousands of species,” said Palumbi in an interview.

c. SPAMIs should be possibly linked within Integrated Coastal and Marine Management

¹⁴ Boero, F., Briand, F., Micheli, F. 2000. Scientific design and monitoring of Mediterranean marine protected areas. Porto Cesareo (Italy), 23-26 October 1999. CIESM Workshop Series 8, 64 p.

¹⁵ FAO, 2001. Report of the Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem.

¹⁶ Palumbi, S. 2002. Marine reserves: a tool for ecosystem management and conservation. Pew Oceans Commission.

Several recent PA works, both on land and in the sea, have noted the importance of external factors affecting protected areas, and emphasized the vulnerability of such areas to large-scale threats sometimes originating very far from the reserves' boundaries¹⁷. Managing a MPA in isolation from surrounding land and sea uses, and without wide cooperation from agencies, stakeholders and impacters, is likely to be ineffective. Because of the highly connected nature of the sea, which efficiently transmits substances and forcing factors, a MPA will rarely succeed unless it is embedded in an integrated ecosystem management regime, or it is so large that it constitutes an ecosystem by itself. MPAs are often designed and implemented without recognition of the larger system within which they are located. The management of MPAs takes place within the context of a greater ocean governance system, but often with little or no integration with it. Clearly, a wider programme of coastal resources management would ensure that MPAs do not exist as "islands of protection" surrounded by uncontrolled pollution, habitat destruction and overfishing. Such an appropriate framework for incorporation of protected areas into a larger system of protection, and a method of consensus building for their support, is deeply embedded in what is today known with a number of different names, one of which is Integrated Coastal and Marine Management (ICMM). As it is well-known, efforts currently exist to adopt a regime of ICMM both at the European level¹⁸, and within the so-called "Barcelona System"¹⁹. For maximum effectiveness, it will be important to ensure that a Mediterranean network of MPAs such as the SPAMI system will develop in harmony with ICMM, whenever such a scheme will eventually be adopted in the Mediterranean region.

d. The issue of governance

The success of the Mediterranean network of MPAs enshrined in the SPAMI List will only in minor part rest on a regional, super-national effort. In fact, the efficiency of the entire network will basically depend on the efficiency of the single building blocks - i.e., of the single MPAs – which is the sole responsibility of the Parties that created them.

Governance²⁰ is one of the major issues to confront in the effort of obtaining effective MPAs. This is true in the Mediterranean as well as at the global level. Unfortunately,

¹⁷ Jameson, S.C., Tupper, M.H., Ridley, J.M. 2002. The three screen doors: Can marine "protected" areas be effective? Marine Pollution Bulletin 44:1177-1183.

¹⁸ See: <http://europa.eu.int/comm/environment/iczm/home.htm>

¹⁹ See: <http://www.pap-thecoastcentre.org/activities.html>

²⁰ In a recent presentation by John Scanlon, Director of the IUCN Environmental Law Centre, Bonn, "governance" has been defined as:

"... the means by which society defines goals and priorities and advances cooperation; be it internationally, regionally, nationally or locally. Governance arrangements are expressed through legal and policy frameworks, strategies, and action plans; they include the organizational arrangements for following up on policies and plans and monitoring performance. Governance covers the rules of decision-making, including who gets access to information and participates in the decision making process, as well as the decisions

most Mediterranean MPAs are affected by crippling shortcomings in their governance system. Among these, inexistent or insufficient management planning; inadequate national framework legislation for MPAs, capable of taking into account socio-economic and environmental change; insufficient mechanisms for consultation, participation and involvement of stakeholders; low levels of public support due to weak awareness and information effort; and conflicting mechanisms among different administrative systems at national and local levels, resulting in paralysing effects on management and causing intolerable instability in the managing bodies.

Therefore, to ensure that there will be an efficient Mediterranean network, support to the Parties will be needed to set up a governance system to address the problems listed in the above paragraph, and that will also include: monitoring and evaluation of activities to allow accountability; clear definitions of the permissible uses taking into account the opinion and rights of the stakeholders as well as the customary uses; enforcement activities to contribute to the rule of law; appealing and redressing mechanisms; transparent funding strategy to ensure proportionality between the funds and the management activities; capacity building to ensure and promote public participation; ensure collaboration mechanisms between the different ministries that allow applying an integrated management²¹.

themselves". It has also been described as fundamentally about "power, relationships and accountability: who has influence, who decides, and how decision makers are held accountable".

²¹ The governance gaps and mitigation measures listed here were outlined in a Workshop on governance "From Murcia to Durban", organised by IUCN in Murcia, Spain, in March 2003.

4. The current situation

a. Requirements for the SPAMIs deriving from the provisions of the Protocol

In its Part 2, the Protocol provides for the establishment of Specially Protected Areas by each Party, the “SPAs” (Section 1), as well as for the establishment of the List of Specially Protected Areas of Mediterranean Importance, the “SPAMI List” (Section 2). The linkage in the Protocol between Party-established SPAs and MoP-established SPAMIs is unclear. However, it obviously seems desirable that the SPAMI List should preferentially include protected areas which fulfil the objectives and measures set forth for SPAs in Art. 4 of the Protocol; thereby expressing the legislator’s intention of extending to the SPAMIs such objectives and measures.

These objectives include the safeguarding of: representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain their biological diversity; of habitats which are in danger of disappearing in their natural area of distribution in the Mediterranean, or which have a reduced natural area of distribution as a consequence of their regression or on account of their intrinsically restricted area; of habitats critical to the survival, reproduction and recovery of endangered, threatened or endemic species of flora or fauna; finally, of sites of particular importance because of their scientific, aesthetic, cultural or educational interest.

Protection measures required for SPAs include, according to the Protocol, the strengthening of the applications of other Protocols and other relevant treaties; the prohibition of dumping or discharge of wastes; the regulation of the passage, stopping and anchoring of ships; the regulation of the introduction of non-indigenous or GM species, and of the introduction/reintroduction of species which were once present in the area; the regulation of activities involving the exploration, modification or exploitation of soil and subsoil; the regulation of research; the regulation or prohibition of fishing, hunting, taking, harvesting, trading of species originating from the SPA; and the regulation or prohibition of activities likely to harm or disturb species. Furthermore, the required planning and management of SPAs includes the adoption of supervision and monitoring measures, a management plan, ecological monitoring programmes, the involvement of stakeholders, the adoption of financing mechanisms, the development of compatible activities, training, infrastructure development, the adoption of contingency plans incorporating measures for responding to incidents, and, in the case of SPAs covering both land and marine areas, the implementation of a management system encompassing both portions.

Accordingly, proposals for the inclusion of protected areas in the SPAMI List shall indicate the protection and management measures applied to the area as well as the means of their implementation. Prospective areas must be in conformity with the

common guidelines and criteria adopted pursuant to Article 16. The Party (or Parties) that proposed the inclusion of the area in the List is (are) responsible for the implementation of the conservation and management measures specified in the proposal. The Parties may revise the SPAMI List, based on a report prepared by the RAC/SPA, and, if there are important reasons (e.g., if a management plan is no longer existing or enforced), an area can be suppressed entirely or in part from the List. To facilitate the process of evaluating whether prospective SPAMIs fulfil the requirements, proposals must be submitted by the concerned Party or Parties based on a standard format, prepared by the RAC/SPA.

b. The current status of the SPAMI List

The SPAMI List consists today of 12 protected areas²². Of these, eleven (seven in Spain, one in France, three in Tunisia) are coastal areas being in size from small to moderate. The remaining area – the International Sanctuary for Mediterranean Marine Mammals - remains in stark contrast with the others in many respects: it is very large (covering a marine surface of almost 90.000 km²), it includes the national waters of three Parties (France, Italy and Monaco), thereby being the first Mediterranean transboundary protected area, and it also includes, for its greatest portion, the Mediterranean high seas. The “Cetacean Sanctuary” (as it is informally known) is in fact the first proper High Seas Marine Protected Area (HSMPA) being established in the world, and as such it is attracting considerable interest worldwide, as well as great visibility on the Mediterranean in general and on the SPAMI system in particular.

However, protected areas included in the SPAMI List during the last Meeting of the Contracting Parties were still missing important elements concerning their requirements for being listed; most notably, very few of them have adopted a management plan. The decision by the Meeting of the Parties to include such areas in the List was justified by the clear intention of kick-starting the SPAMI process without further delay, however it was also decided that an evaluation of each SPAMI’s performance and management effectiveness in the subsequent years, prior to the next Meeting of the Parties, will be performed, so that listings can be confirmed, or de-listing procedures implemented.

Therefore, in the limited window frame separating the present from the date of the next Meeting of the Parties, it will be very important that those SPAMIs that are still short of the essential requirements for being in the List endeavour in earnest to timely address such shortcomings. The process is rather delicate, because on the one hand it is important that the SPAMI List continues to grow and to include increasingly representative protected areas, whereas on the other hand it is essential that the system

²² Cabo de Gata, Cap de Creus, Iles Medes, Isla de Alboràn, Islas Columbretes, Kneiss, La Galite, Levante de Almería, Mar Menor, Port-Cros, Sanctuary for cetaceans, Zembra et Zembretta.

retain credibility and authoritativeness through a rigorous application of the Protocol's provisions.

The dilemma can only be solved through the creation of an efficient system of support, both technical and legal, to those Parties and PA management bodies that are eager to have their area included in the List, but are encountering seemingly formidable problems in implementing in practice such aspiration.

5. Proposed implementation actions

To ensure efficiency of the SPAMI system, two types of actions can be envisaged: (a) how to facilitate a greater efficiency of the actual SPAMIs, and (b) how to ensure that the system will grow harmoniously as more SPAMIs are being added to the List in the future.

a. Improving the functionality of the established SPAMIs

Ensuring functionality of any MPA presents considerable challenges anywhere in the world, and a demonstration of this is that only few MPAs in the Mediterranean have succeeded in reaching a satisfactory level of functionality so far. Problems are of a various nature: inappropriate choice of areas to be protected, lack of clear objectives in the establishment phase, lack of management focus and governance expertise, lack of political agreement, and insufficient awareness of the potential benefits. Clearly a great effort is needed to assist many of the areas now included²³ in the SPAMI List to reach a status in which even the most elementary requirements for being part of such List are fulfilled.

Such effort could consist of four elements, in a chronological order: (a) an immediate, emergency action to ensure continuation of listing of the current SPAMIs, (b) the implementation of an articulate capacity-building strategy, (c) the implementation of a SPAMI effectiveness evaluation process, (d) a campaign for promoting international awareness and recognition of the SPAMI List.

First it is important to act rapidly to dispel the risk that any one of the 12 SPAMIs currently inscribed in the List be de-listed. An analysis of the status of the fulfilment of requirements by the various SPAMIs was performed last year by the RAC/SPA; such analysis includes suggestions for actions to solve perceived problems. It seems advisable that such existing problems be addressed as soon as possible by devising appropriate actions within the available time.

Second, a programme of specific training in MPA management should be implemented, to ensure that all actors involved in the management of existing SPAMIs will receive the necessary capacity building support.

Third, a framework for management evaluation should be put in place, so that it will be possible to monitor and evaluate the effectiveness of MPAs and to apply the findings to progressively improve management. Effectiveness needs to be measured from various points of view, ranging from the status of the area and the way in which a protected

²³ Such effort will also be necessary for areas aspiring to be listed.

area is designed through to the outcomes of management actions and the overall state of conservation of the area. Evaluation is needed at many different levels, from quick assessments to detailed monitoring studies undertaken to inform adaptive management²⁴. Obviously, in order to evaluate management effectiveness, a detailed understanding of the specific threats that the management is set to address is of paramount importance. The need of linking an analysis of threats with management action and effectiveness can never be stressed enough.

Fourth, the full recognition of the importance and implications that the SPAMI system bears onto Mediterranean conservation and sustainable development needs to be acquired at all levels: from the relevant international organisations (e.g., conservation Agreements and Conventions such as CBD and CMS; UN organisations such as UNESCO, FAO, IMO; international NGOs), to the scientific, NGO and stakeholder communities in the Mediterranean, to the Protocol Parties themselves who may not all be aware of the full range opportunities afforded by a regional network of MPAs, to the States having fishing fleets operating in the Mediterranean, to invite them to comply with the measures applicable to the SPAMIs. Therefore, an articulated awareness campaign strategy, tailored to all these different targets, should be devised and implemented. The first important occasion for such an awareness action to take place, with the widest possible audience within the global PA community, will be World Park Congress (WPC, Durban, South Africa, September 2003), organised by IUCN's World Commission on Protected Areas²⁵. Substantial preparatory work to ensure that the Mediterranean PA effort is given adequate visibility at WPC was carried out by the Malaga IUCN Centre for Mediterranean Cooperation, most notably with the organisation of the "Murcia to Durban" Conference in Murcia, March 2003.

Given the rather high level of specialisation need for the above tasks, these should perhaps best be entrusted to a special "SPAMI Task Force", operating under the coordination of the RAC/SPA, and composed by a membership provided by the Parties, by the scientific community, by the NGO community, by the PA managers' community, and by the stakeholders at large. Furthermore, for the functioning of such SPAMI Task Force, a SPAMI Fund should be established, possibly through resources deriving from voluntary contributions from States or other donor agencies.

b. Ensuring the harmonic growth of the SPAMI system

Once the strengthening process of the existing SPAMIs has been completed, full attention may be concentrated on future improvements. The SPAMI Task Force and

²⁴ Hockings, M., Stolton, S., Dudley, N. 2000. A framework for assessing the management of protected areas. World Commission on Protected Areas Best Practice Protected Area Guidelines Series No. 6, IUCN, Gland, 132 p.

²⁵ See <http://www.iucn.org/themes/wcpa/wpc2003/index.htm>

Fund could thus be directed to this long-term effort. The following lines of action may be envisaged:

- “design” process of a Mediterranean network of representative MPAs (i.e., the SPAMI List), ensuring that the network becomes enriched with a set of geographically balanced MPAs, sufficient to cover the full range of habitats and species of Mediterranean importance (with a special attention for the species listed in Annexes II and III to the Protocol), and that full consideration be given to the orientations and approaches for the establishment of MPA networks discussed in Section 3 of this document. Such design should be based on inventorying work by the Parties, provided for in Article 15 of the Protocol²⁶. Concerning inventories, the importance should be stressed here that Parties endeavour in the sharing of a common inventorying and monitoring scheme, based on the Standard Data-entry Forms developed by the RAC/SPA. A national scheme involving both inventorying and monitoring, and limited for now to the core zones of established MPAs, was initiated in Italy with the name of “Afrodite”²⁷, and has been yielding remarkable results.
- On the basis of such inventories, a comprehensive, Mediterranean-wide assessment should be made of existing SPAs that should be included in the SPAMI List to enrich and complement a regional network.
- Such Mediterranean-wide assessment should also generate a list of “Mediterranean Priority Areas of Conservation” where protected areas have not been established yet, but containing sites of great biodiversity value which would significantly accrue to the SPAMI List with a view of creating a functional, representative Mediterranean network of MPAs²⁸. In such particularly deserving sites, Parties could then be stimulated to create SPAs if possible, so that these can be eventually be included in the List. However, the indication of Mediterranean Priority Areas for Conservation should be solely a guiding principle used to orientate and inform political decision; the establishment of new SPAs should never be a “top-down” process, because the involvement of all stakeholders in both planning and management phases is a crucial element of success (see next point).
- Address with energy and conviction the issue of governance of MPAs in the Mediterranean, by ensuring that the existing gaps in the actual system of governance are filled and that all possible remedial measures are taken (see Section 3d of this document).

²⁶ Article 15. **INVENTORIES.** Each Party shall compile comprehensive inventories of: (a) areas over which they exercise sovereignty or jurisdiction that contain rare or fragile ecosystems, that are reservoirs of biological diversity, that are important for threatened or endangered species;

²⁷ See <http://www.icram.org/afrodite/summary.htm>

²⁸ IUCN’s World Commission on Protected Areas (WCPA) is considering the possibility of cooperating to such an effort as a contribution to the establishment of a Mediterranean network of MPAs through its Mediterranean Group.

- A comprehensive strategy for capacity building at the regional level should be devised and implemented. Know-how of the various components of MPA best practice at all levels and in all phases – including site selection criteria, legislation, use of science, governance and management– is indeed still limited in the Mediterranean. Lack of trained managers seems like a particularly debilitating gap in the region. Furthermore, the process of preparing proposals for the establishment of new SPAMIs is not easy. Prospective proposers could greatly benefit from *an hoc* training programmes, and objectives could thus be reached faster and with less energy expenditure.
- Ensure that the framework for management evaluation implemented for the existing SPAMIs (see Section 5a above) be made permanent and routinely applied to the SPAMI system.
- Continue with the awareness and education campaigns described in Section 5a above.
- Strive to enhance cooperation with organisations sharing similar goals, and avoid duplication of effort, drawing attention on the opportunities to be gained by establishing systems of partnership (e.g., “Type II partnership”) with such organisations. For instance, the RAC/SPA could ensure that the experience derived from the establishment of the SPAMI system be shared with other pertinent organisations (e.g., the appropriate bodies within CBD; the system of coastal SACs designated in European Countries under the EU Habitats Directive, etc.), and that, on the other hand, expertise from other organisations (e.g., IUCN’s WCPA, CIESM, etc.) be used to enhance the performance of the SPAMI system.

Finally, a vision may be prospected in which the SPAMI system can be made to stimulate the growth in the Mediterranean of a community of professionals who work together towards the common goal of creating and maintaining a vital regional network of MPAs, thus promoting at the same time the conservation of the natural and cultural environment and sustainable development. The RAC/SPA could well become the core and clearing house of such a community, by strengthening its coordinating role and promoting cross-borders communication, transfer of information and know-how, and exchanges among SPAMI practitioners, decision makers, stakeholders and the public at large.