

## **Developing ecological MPA networks in the Mediterranean<sup>1</sup>**

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### *Preamble*

*A framework exists within the Barcelona Convention to address conservation concerns at the regional level, including the establishment of specially protected areas of Mediterranean importance (SPAMIs). In light of the WSSD commitment of the world's nations to establish representative networks of MPAs by 2012, the need arises to support the transformation of the existing SPAMIs into a system of MPAs that is truly representative of the full complement of Mediterranean habitats. This would include coastal habitats, benthic and neritic, and offshore habitats comprising pelagic waters, seamounts, canyons, deep-sea corals and other bathyal habitats, across national boundaries and beyond. Such a representative network would recognise the ecological linkages of widely separated areas, thus tying individual protected areas into more functionally viable management entities. An effort launched by WCPA of the IUCN was initiated to support the Barcelona framework in catalysing regional, national and local efforts to design and establish MPAs, and in improving protected area legislation to allow the WSSD target to be met. The process involves mapping habitat types in existing MPAs, analysing MPA representativeness at the ecological and biogeographic levels, assessing current MPA governance, and closing the data-gap on habitat distribution. Furthermore, criteria are defined and appropriate methodologies selected for determining priority sites where new MPAs should be established.*

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### *Extended Abstract*

The first step of the World Commission on Protected Areas (WCPA) effort includes the creation of a database of the existing Mediterranean MPAs, with a description of the habitat types represented in each MPA. For benthic habitats, the reference classification developed by UNEP MAP is adopted (Anon. 1999); a classification of Mediterranean pelagic habitats was never attempted and will be included in the described effort. The review is based on the existing sources, including a survey of inventories already performed within the framework of existing networks of Mediterranean MPAs, such as the SPAMI List, the Emerald Network, the Natura 2000 Network, and the UNESCO MAB and the World Heritage Sites programmes, and will also involve the request from the management bodies of single MPAs for the provision of data on the extent of the different habitats comprised in any particular protected area, to be included in the region-wide database. The programme will emphasise the need for closing the data-gap on habitat distribution in the Mediterranean Sea, drawing in the region's scientific community, in particular the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM), in generating and synthesizing the knowledge required. The survey will afford a review of the regional representativeness of the existing MPAs at the ecological and biogeographic levels. Through the definition of criteria and selection of methods for determining priority sites for the establishment of new MPAs, current gaps in habitat distribution in Mediterranean protected areas will be detected. In particular, this analysis will emphasise the need for the establishment of MPAs encompassing important marine habitats currently excluded from spatial protection, such as pelagic regions containing biologically-rich and life-sustaining oceanographic features, submarine canyons, sea mounts (many of

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<sup>1</sup> p. 380 in: Day J., Senior J., Monk S., Neal W. (eds.). 2007. Conference Proceedings of the First International Marine Protected Areas Congress, 23-27 October 2005: IMPAC1, Geelong, Victoria, Australia. 665 p.

which lie beyond national jurisdiction), and the deep sea. The Mediterranean deep sea bottom and water column is particularly relevant to this effort, in the light of the great ecological value of many unique habitats that are found there (Simard and Tudela 2005), and of the decision recently adopted by the General Fisheries Commission for the Mediterranean, banning trawling at depths greater than 1000 m from the entire region. During the course of the work, which is expected to last five years and will involve the organisation of at least four workshops, an innovative concept of a strategic Mediterranean MPA system will emerge, in which a framework of linkages among the different Mediterranean subsystems (e.g., coastal, pelagic, canyons, seamounts) and MPA networks is connected through a region-wide protected volume of deep waters, encompassing all the depths greater than 1000 m. Such a framework provides critical elements of the conceptual background needed to support the regional efforts of decision makers in meeting the 2012 WSSD targets concerning networks of MPAs.

(1) Anonymous. 1999. Draft reference classification of marine habitat types for the Mediterranean region. As elaborated by the Meeting of Experts on marine habitat types in the Mediterranean region (Hyères, 18-20 November 1999) and reviewed and approved by the 4th Meeting of National Focal Points for SPA (Tunis, 12-14 April 1999).

(2) Simard F., Tudela S. 2005. The Mediterranean deep-sea: highly valuable ecosystems in need of protection. IMPAC 1 Abstracts.