



Terms of reference

Preparation of a status report of the ecology of the Adriatic Sea in order to guide the development of Marine Protected Areas and organization of associated meetings

1- Context

Since 2008, the Regional Activity Centre for Specially Protected Areas (RAC-SPA) under the framework of the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP) has been implementing the “MedOpenSeas” project to identify and establish Marine Protected Areas (MPAs) in the open seas, including the deep seas. The primary objective of this project is to promote the establishment of a representative ecological network of MPAs in the Mediterranean within the framework of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol) on the establishment of Specially Protected Areas of Mediterranean Importance (SPAMIs). This project is financially supported by the European Commission, and is now in its third phase.

The first phase of the project, completed in late 2009, led to the identification of twelve priority conservation areas in the open seas, including the deep seas (see map in Figure 1). These priority areas, including the Adriatic Sea, could become candidates for SPAMI listing and/or be recommended for inclusion in other frameworks, such as Ecologically or Biologically Significant Areas (EBSAs) developed under the Convention on Biological Diversity (CBD).

The aim of the project’s second phase, completed in early 2012, was to support neighbouring Parties of the above-mentioned priority areas in evaluating and potentially presenting these sites as candidate(s) for inclusion in the SPAMI List, in accordance with the provisions of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean. The RAC/SPA in Tunis has been facilitating this preparatory work, including oceanographic surveys and stakeholder negotiations. The programme of work of the second phase included the establishment of *ad hoc* working groups, composed of representatives from the countries bordering the Alboran Sea (Algeria, Morocco, Spain) and Gulf of Lions (France, Spain) priority areas.

The current third phase focuses on the spatial planning and evaluation of three priority areas (see Figure 1 and Table 1): Adriatic Sea, Alboran Sea and the Sicily Channel/Tunisian Plateau areas. The process in the Alboran Sea benefits from initial preparatory work and a stakeholder meeting in 2011 conducted during the second project phase.

The RAC/SPA is currently starting to prepare meetings with the representatives of the neighbouring countries to these three sites, in order to present the proposed process and to discuss the feasibility of setting up multilateral working groups. The organization of these meetings will be supported through this consultancy (see below).

Table 1 List of neighbouring countries for the priority areas addressed by the third phase of the “MedOpenSeas” project.

Priority areas addressed during 3rd phase	Neighbouring countries
Adriatic Sea	Albania, Bosnia-Herzegovina, Croatia, Italy, Montenegro and Slovenia
Alboran Sea	Algeria, Morocco and Spain
Sicily Channel/Tunisian Plateau	Italy, Libya, Malta and Tunisia

A wealth of biological and environmental data are available for the above-mentioned areas, based on long-term research and exploration efforts made by several countries. Ongoing programmes, for example on seabirds and marine mammals, continue to improve our understanding of the biodiversity in these regions.

Much of these data are however scattered across different national research institutes and are not necessarily formally published. A summary report and review of our current understanding of the biodiversity for each of the four priority areas will be essential to develop MPAs in these key open sea regions. Therefore expertise will be recruited to compile and review available data to ultimately produce a report illustrating the state of ecological knowledge for the respective areas. These outputs will provide an essential foundation to allow the *ad hoc* working groups to base their decisions on best available science.

In parallel to the preparation of a status report, there will be an initial and a follow-up project meeting for each priority area. This will assist stakeholder communication throughout the process, as well as the collection of data for the status report.

2- Objective of the consultancy

The goal of the herewith advertised consultancy package is to firstly support the Adriatic Sea working group through the collection, compilation and review of biological and environmental data required to evaluate and spatially plan MPAs within the area. The working group in turn is tasked with evaluating the establishment of SPAMIs within the Adriatic open seas. Secondly, the consultancy package includes the organization of several project meetings to be conducted in parallel to the preparation of the report.

Throughout the report preparation period a concerted effort should be made to investigate and include research outputs and environmental projects from all the neighbouring countries, ie Albania, Bosnia-Herzegovina, Croatia, Italy, Montenegro and Slovenia. The final output will be a report of the marine ecology and use (primarily fishing activities) of the area, including a compilation of GIS layers to facilitate spatial planning of MPAs. The report will be built up from several thematic reports (e.g. on cetaceans) as indicated by the project timetable below to cover the full breadth of ecological information required for MPA mapping.

The final marine ecology output will be used to guide the following:

- identification of sites that deserve to be managed, in terms of conservation and sustainable use of the resources
- development of suitable management measures for these sites.

As part of this consultancy RAC/SPA will recruit expertise on the following:

- fisheries
- marine mammal status and conservation
- seabird status and conservation
- marine ecology of the area
- organization of environmental policy meetings

The consultants are expected to include the following sources of information in their literature review and data compilation: peer-reviewed literature, grey literature (e.g. institutional and technical reports) and expert opinion, collected through personal communication with relevant stakeholders during the consultancy. In addition, the consultants are requested to compile a list of experts (both scientific and technical), which may be requested to support the decision making process, as appropriate.

3- Tasks to be undertaken

The consultants' work will be supervised by RAC/SPA and by the working group made up of national experts selected by the concerned countries' representatives (Table 1). The specific tasks for each expertise required and the group outputs are listed below. At an advanced stage of the project all the below-listed outputs, specifically the thematic reports, will be combined into one marine ecology report (see timetable below).

The fisheries expertise is needed to:

- conduct a literature survey of species distribution and population dynamics of fish in the Adriatic open sea area, with particular emphasis on target areas for fisheries and reproductive zones (e.g. nursery and spawning grounds)
- describe the fisheries activities conducted within the area (e.g. fishing gears, fishing sectors, fleets operating in the area, targeted species and aquaculture production), including their temporal and spatial dynamics, and evaluate the likely development of fishing activities within the area in the future.
- assess the impact of incidental catch of sensitive species within the area, with particular emphasis on marine turtles and elasmobranchs, and estimate the seasonal variation in bycatch
- provide GIS layers of the spatial distribution of both fisheries resources and fishing activities to the above-mentioned marine ecology expertise for inclusion in the overall project GIS

The marine mammal expertise is needed to:

- assess the population status of the different species of marine mammals that frequent the Adriatic open sea area (ecology, behaviour, breeding, diet, IUCN conservation status, international measures of protection and national measures of protection)
- illustrate and analyse the distribution of those populations of marine mammals which regularly frequent the target priority area, including any temporal and spatial variation
- assess the impact of the threats present, taking into account any interactions with human activities such as collisions and bycatch
 - provide data on shipping activities in the area, such as shipping lanes and the number of vessels, and compile information on absolute collision and bycatch cases per annum, to the extent that these are available

- identify important sites for the conservation of marine mammals in the area, including critical coastal sites which are regularly visited by the marine mammal populations identified in the open sea, and spatially map these within a GIS for inclusion by the marine ecology experts in the overall project GIS

The seabird expertise is needed to:

- assess the population status of the seabird species which frequent the Adriatic open sea area (ecology, behaviour, breeding, diet, IUCN conservation status, international measures of protection, and national measures of protection)
- illustrate and analyse the distribution of those populations of seabirds which regularly frequent the target priority area (including breeding colonies) and identify critical sites in the open seas (taking into account any temporal and spatial variation)
- assess the impact of threats affecting the species present, taking into account any interactions with human activities (as far as possible, provide an estimate of the number of individuals affected)
- Review and refine the spatial mapping of critical sites proposed for different seabird species in the target priority area, including the work on [Important Bird Areas published by RAC/SPA in 2009](#).

The expertise in Mediterranean marine ecology is needed to:

- produce a report and a synthesis of the oceanographic and ecological data available for the Adriatic open sea area
- describe and characterize the different types of habitats found in the Adriatic open sea area (following the format used to establish the reference list of marine habitats types adopted by the Parties to the Barcelona Convention – see the [Handbook for interpreting types of marine habitat for the selection of sites to be included in the national inventories of natural sites of conservation interest](#)),
- analyse, as far as possible, the ecosystem functioning of the area, taking into consideration the specific environmental conditions (e.g. hydrodynamics, geomorphology)
- integrate the work of the other experts into a single marine ecology report and act as lead author for the review process (see project timetable)
- identify and map critical areas for threatened species listed under the Barcelona Convention, with emphasis on seabirds, elasmobranchs, turtles and marine mammals
- Compile and produce GIS layers for the available data to assist the spatial mapping of MPAs and management regimes; in formats including shp and kml, make these GIS layers and their metadata available for inclusion in the [MedOpenSeas seasketch project](#)

It should be noted that the overall study will focus on the pelagic ecosystems and the deep benthic habitats of the Adriatic open sea area. The coastal ecosystems will only be considered in terms of their functional connectivity parameters (e.g. marine birds' colonies). It is envisaged that the work of all consultants will be brought together in one marine ecology report (see project timetable). In addition, the following tasks are addressed by all consultants together and also included in the marine ecology report:

- Identifying and describing the human activities carried out in the study area
- Outlining and where possible quantifying the impacts of these activities on the

ecosystems and indicating where they represent threats (with an overview of which species and habitats are affected by which activity); while ensuring that results will be consistent with the provisions within the “Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)”, as appropriate.

- Spatially identifying critical sites which may deserve specific management and/or protection, taking into consideration ecological functions and connectivity between these areas and coastal zones.

The expertise on Meetings organization is needed to:

- Organize two project meetings, one at the start of the project to kick-start the collection of information and stakeholder discussions and one towards the project end to present the report and spatial planning proposals, which are intended to guide decision-making for SPAMI development by the Mediterranean stakeholders.
- Take care of all matters of meeting organization, including identification of meeting venue and arrangement of travel schedules for individual participants. Meeting venue and dates will be selected in close consultation with RAC/SPA, who will take care of meeting documentation in addition to those reports requested by the consultants (see 4. for a timetable).

4- Expected outputs and deadlines

Marine ecology report

Towards the end of the consultancy all project outputs produced by the different experts will be compiled into a report entitled “*Description of the ecology of the Adriatic Sea and identification of the areas that may deserve to be protected*”. This report is envisaged to act as a baseline of the current ecological status of the region and will be used to guide the mapping of MPAs and other marine zones. The final report will be fully referenced including the bibliography of each of the individual expert reports, as well as the contact details of the experts consulted.

Spatial planning and GIS data

The ultimate aim of this consultancy is to facilitate the spatial planning of MPAs. Therefore particular emphasis is placed on georeferenced information and GIS shapes. The final marine ecology report including the work of all experts should illustrate the information presented through maps wherever possible. Throughout the project relevant GIS layers shall be collected and made available to RAC/SPA and to the [SeaSketch online workspace](#). At the end of the project a complete set of all GIS layers will be handed to RAC/SPA as well as to the national authorities, in addition to copies of the final reports. The GIS data will be prepared following technical specifications that we will be discussed and agreed between the different stakeholders.

Review process

The intermediate marine ecology reports will be shared with the members of the working group and RAC/SPA for review (see timetable).

To ensure a timely and efficient delivery of the consultancy, it is recommended that emphasis is placed on the following factors throughout the project:

- Close collaboration and maximization of synergies between country representatives and experts, specifically with regards to identifying and accessing technical data held by organizations within the specific neighbor countries
- Regular communication with relevant SPA Focal Points and briefings on project progress
- Engagement of a wide network of experts to ensure that the report will be based on best available science and that the outputs will be peer-reviewed
- Teamwork and close collaboration between the individual consultants to ensure that the project outputs will be fully coherent, that methods and style are homogeneous and that peer-review is actively practiced within the group

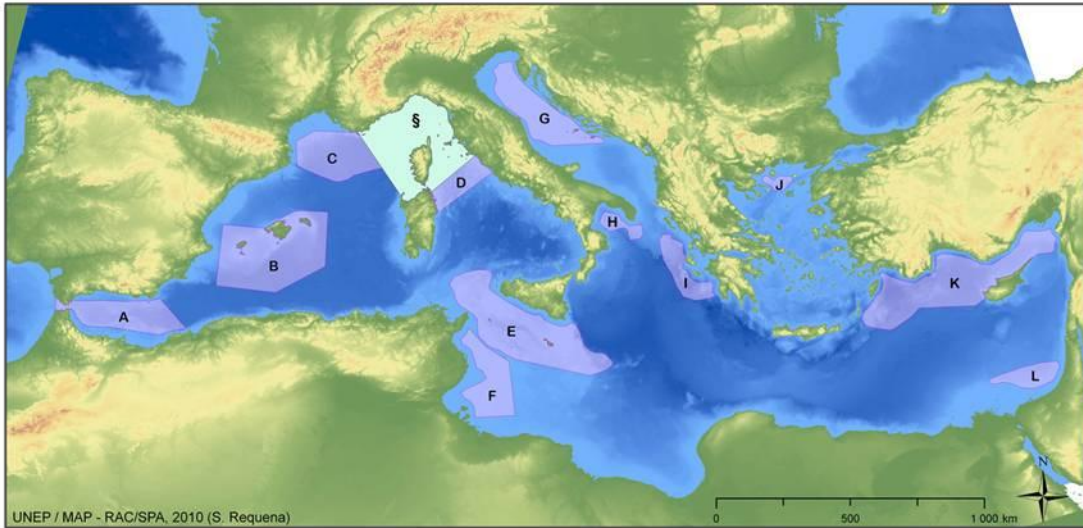
The reports will be written in English. Strict adherence to project deadlines is required to allow for editing and eventual translation in time for stakeholder negotiations.

<u>Expected outputs</u>	<u>Deadlines</u>
<p>Provisional thematic reports</p> <p>Each expert will prepare a first draft thematic report. The experts will review their reports taking into consideration the comments made by RAC/SPA and working group members.</p>	<p>➤ 20 - June 2013</p>
<p>Final thematic reports</p> <p>Each expert will prepare a final thematic report after taking into consideration the comments provided.</p>	<p>➤ 15 – September 2013</p>
<p>Intermediate marine ecology report</p> <p><i>“Description of the ecology of the Adriatic Sea and identification of the areas that may deserve to be protected”</i></p> <p>This report will be prepared by the experts in marine ecology on the basis of the different thematic reports. It will be a compilation and synthesis of the work of the different experts. This report will be circulated amongst the SPA Focal Points and other relevant experts, as appropriate, for comments.</p>	<p>➤ 15 - October 2013</p>
<p>Final marine ecology report</p> <p>The final report will be prepared taking into consideration the comments made on the intermediate general report. Each expert will review the intermediate report for the part that concerns his or her work, as well as those sections which are relevant to all experts.</p>	<p>➤ 15 - December 2013</p>

Figure 1



Priority conservation areas in the open seas, including the deep seas, likely to contain sites that could be candidates for the SPAMI List



UNEP / MAP - RAC/SPA, 2010 (S. Requena)

A: Alborán Seamounts; B: Southern Balearic; C: Gulf of Lions shelf and slope; D: Central Tyrrhenian; E: Northern Strait of Sicily (including Adventure and nearby banks); F: Southern Strait of Sicily; G: Northern and Central Adriatic; H: Santa Maria di Leuca; I: Northeastern Ionian; J: Thracian Sea; K: Northeastern Levantine Sea and Rhodes Gyre; L: Nile Delta Region (S: Pelagos Sanctuary declared as SPAMI in 2001)

INSTRUCTIONS FOR CANDIDATES

Applications may be submitted for either the entire consultancy package or for individual thematic parts (i.e. fisheries, marine mammals, seabirds).

Candidates should send a cover letter outlining the technical approach to be taken for achieving the output of the above respective expertise applied for.

Candidates are kindly requested to include a short summary of past relevant work, achievements and eventual references, in addition to a CV in English or French (as well as those CVs of participating team members, as appropriate):

Terms and conditions

- Applications can be submitted by consultants, by institutions / organisations or jointly by any of these
- Applications shall indicate how the expertise of the consultant(s) is suited to achieving the project outputs
- RAC/SPA may extend the deadline for the submission of applications.
- The final selection of applications will be in accordance with the application evaluation procedures of RAC/SPA. RAC/SPA's decision will be final.
- Candidates shall work as necessary with other consultancy team members as allocated by RAC/SPA

Evaluation criteria

Applications will be evaluated on the basis of the following criteria:

- Suitability of the profile/s.
- Scientific/technical references for similar engagements.
- Capacity to undertake the tasks in English and, eventually, also in French
- Quality and consistency of the technical approach proposed

Submission of applications

The deadline for submissions is 01 May 2013. Applications must be submitted by email including a subject heading reading "MedOpenSeas Call". Any application submitted after the deadline will be rejected. All applications will be treated with the strictest confidentiality. Only candidates selected for interview will be contacted by RAC/SPA.

The applications should be sent **by email** to:

Director of RAC/SPA
United Nations Environment Programme
Mediterranean Action Plan
Regional Activity Centre for
Specially Protected Areas (RAC/SPA)
B.P. 337 - 1080 Tunis Cedex. TUNISIA
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Cc: daniel.cebrian@rac-spa.org