

Terms of Reference (ToR)

for a Consultant (Thematic Expert) to support the Correspondence Group- Biodiversity and Fisheries Cluster in the EcAp-MED Project

Request for: Consultant Individual contractor

Organizational Unit: Coordinating Unit for the Mediterranean Action Plan

1. Purpose (justification for request)

1.1 Explain the requirement for a consultant / individual

The Ecosystem Approach (EcAp) is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way, as stated by Convention of Biological Diversity. It goes beyond examining single issues, species, or ecosystem functions in isolation. Instead, it recognizes ecological systems for what they are: rich mixes of elements that interact with each other continuously. This understanding is particularly important for coasts and seas, where the nature of water keeps systems and functions connected.

The main valued added of the Ecosystems Approach in the context of the Barcelona Convention is a renewed emphasis on implementation and integration that will strengthen our ability to understand and address cumulative risks and effects as well as to better focus our action on priority targets. Simply put, the EcAp brings MAP's many sectoral analyses and management measures into a single integrated framework which will results in an adaptive management strategy that will be periodically monitored, evaluated and revised through a rigorous 2012-2018 Six-year Management Cycle.

Decisions IG 17/6 "Implementation of the ecosystem approach to the management of human activities that may affect the Mediterranean marine and coastal environment" and IG 20/4 "Implementing MAP ecosystem approach roadmap: Mediterranean Ecological and Operational Objectives, Indicators and Timetable for implementing the ecosystem approach roadmap adopted by the Contracting parties to the Barcelona Convention" respectively in COP 15 (2008) and COP17 (2012) articulate a systematic process for moving forward towards more effective ecosystems-based management in the Mediterranean. They also contain the agreement reached on the progress achieved and define priorities on the way forward.

The progress achieved to date in the seven steps process identified for moving towards a more effective, ecosystem-based management is as follows:

I. Definition of an **Ecological Vision for the Mediterranean.**

"A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse for the benefit of present and future generations".

II. Setting of common **Mediterranean strategic goals.**

- a. To protect, allow recovery and, where practicable, restore the structure and function of marine and coastal ecosystems thus also protecting biodiversity, in order to achieve and maintain good ecological status and allow for their sustainable use.

- b. To reduce pollution in the marine and coastal environment so as to minimize impacts on and risks to human and/or ecosystem health and/or uses of the sea and the coasts.
 - c. To prevent, reduce and manage the vulnerability of the sea and the coasts to risks induced by human activities and natural events.
- III. Identification of important ecosystem properties and **assessment of ecological status** and pressures.

The UNEP/MAP Barcelona Convention **Initial Integrated Assessment** (Step 3) peer reviewed by GESAMP was completed in 2011 and disseminated to the COP as document IG.20/Inf.8. The Integrated Assessment contains information on the overall nature of the ecosystems in the Mediterranean, including physical and ecological characteristics, pressures that affect the state of the marine environment, conditions or state of the coastal and marine ecosystems, and expected response of ecosystem if trends continue. It identifies existing pressures and impacts affecting the Mediterranean region as well as emerging ones. It has also been useful in highlighting information availability and needs going into the future.

- IV. Development of a set of **ecological objectives** corresponding to the Vision and strategic goals.

The following ecological objectives have been defined through an intensive process of consultation led by the UNEP/MAP Secretariat fully owned by the Contracting Parties and with participation of MAP Partners and technical experts:

1. **Biological diversity is maintained** or enhanced. The quality and occurrence of coastal and marine habitats and the distribution and abundance of coastal and marine species are in line with prevailing physiographic, hydrographic, geographic, and climatic conditions.
2. **Non-indigenous species** introduced by human activities are at levels that **do not adversely alter the ecosystem**.
3. **Populations of selected commercially exploited fish and shellfish are within biologically safe limits**, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. **Alterations to components of marine food webs** caused by resource extraction or human-induced environmental changes **do not have long-term adverse effects** on food web dynamics and related viability.
5. **Human-induced eutrophication is prevented**, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms, and oxygen deficiency in bottom waters.
6. **Sea-floor integrity is maintained**, especially in priority benthic habitats.
7. **Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems**.
8. The **natural dynamics of coastal areas are maintained** and **coastal ecosystems and landscapes are preserved**.
9. **Contaminants cause no significant impact** on coastal and marine ecosystems and human health.
10. **Marine and coastal litter does not adversely affect coastal and marine environments**.
11. **Noise from human activities causes no significant impact on marine and coastal ecosystems**.

The remaining 3 steps of the 7-step process will form the bulk of the forthcoming work for the full-fledged EcAP process in the Mediterranean, and include:

- V. Derivation of **operational** objectives with **indicators** and **target** levels.
- VI. Revision of existing **monitoring programmes** for ongoing assessment and regular updating of targets.
- VII. Development and review of relevant **action plans and programmes**.

The implementation of the EcAp in 2012-2013 has been organized around four specific pillars which capture the main deliverables expected from the Parties and further strengthen and complete the application of the seven steps for the implementation of the EcAp. These are:

- **Targets and Good Environmental Status.** Work on methodologies for the determination of good environmental status and target for each of the 11 agreed Ecological Objectives; and implement a pilot case which successfully tests EcAp indicators (Step 5);
- **Monitoring.** Initial steps to prepare an integrated monitoring system based on the indicators and targets (Step 6);
- **Assessment.** Complement the integrated assessment of the Mediterranean ecosystem with a socio-economic analysis and establish an assessment cycle by developing a UNEP/MAP policy on assessments of the marine and coastal environment to be periodically implemented (Step 3); and,
- Develop and review relevant **measures** for implementation of EcAp (Step 7).

The process for the development of Good Environmental Status and Targets for the Mediterranean will be carried out by the Correspondence Group on GES and Targets, which will be composed of national experts, designated by the Contracting Parties, and will be coordinated by the UNEP/MAP components and the Coordinating Unit. It will work to ensure efficient coverage and in-depth discussions and analysis of all Ecological Objectives (EOs) and it will be made up of 3 clusters: 1) Pollution and litter related EOs (EOs 5, 9, 10 and 11); 2) Biodiversity and Fisheries related EOs (EOs 1, 2, 3, 4 and 6); and 3) Coastal and Hydrological Conditions related EOs (EOs 7 and 8). The expected outcome of the group is defining the methodology for Mediterranean targets, as well as identifying regional targets through a participatory process involving contracting parties and MAP components, to be submitted to COP 18.

The requested Consultancy, in the form of a “Thematic Expert” will focus on “Biodiversity and Fisheries Cluster”.

Ecological Objective 1 - Biodiversity

Ecological Objective	Operational Objectives	Indicators
Biological diversity is maintained or enhanced. The quality and occurrence of coastal¹ and marine habitats² and the distribution and abundance of coastal³ and marine species⁴ are in line with prevailing physiographic, hydrographic, geographic and climatic conditions.	1.1 Species distribution is maintained	1.1.1 Distributional range
		1.1.2 Area covered by the species (for sessile/benthic species)
	1.2 Population size of selected species is maintained	1.2.1 Population abundance
		1.2.2 Population density
	1.3 Population condition of selected species is maintained	1.3.1 Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)
	1.4 Key coastal and marine habitats are not being lost	1.4.1 Potential / observed distributional range of certain coastal and marine habitats listed under SPA protocol
		1.4.2 Distributional pattern of certain coastal and marine habitats listed under SPA protocol
		1.4.3 Condition of the habitat-defining species and communities

¹ By coastal it is understood both the emerged and submerged areas of the coastal zone as considered in the SPA/BD Protocol as well as in the definition of coastal zone in accordance with Article 2e and the geographical coverage of Article 3 of the ICZM Protocol

² Regarding benthic habitats currently, sufficient information exists to make a prioritization amongst those mentioned in the UNEP/MAP - RAC/SPA list of 27 benthic habitats and the priority habitats in areas beyond national jurisdiction following CBD decisions VIII/24 and VIII/21 paragraph 1 . These could include from shallow to deep: biocoenosis of infralittoral algae (facies with vermetids or trottoir), hard beds associated with photophilic algae, meadows of the sea grass *Posidonia oceanica*, hard beds associated with Coralligenous biocenosis and semi dark caves, biocoenosis of shelf-edge detritic bottoms (facies with *Leptometra phalangium*), biocoenosis of deep-sea corals, cold seeps and biocoenosis of bathyal muds (facies with *Isidella elongata*). Amongst pelagic habitats upwelling areas, fronts and gyres need special attention and focus.

³ By coastal it is understood both the emerged and submerged areas of the coastal zone as considered in the SPA/BD Protocol as well as in the definition of coastal zone in accordance with Article 2e and the geographical coverage of Article 3 of the ICZM Protocol

⁴ On the basis of Annex II and III of the SPA and Biodiversity Protocol of the Barcelona Convention

Ecological Objective 2 - Non-indigenous species

Ecological Objective	Operational Objectives	Indicators
Non-indigenous⁵ species⁶ introduced by human activities are at levels that do not adversely alter the ecosystem	2.1 Invasive non-indigenous species introductions are minimized	2.1.1. Spatial distribution, origin and population status (established vs. vagrant) of non-indigenous species
		2.1.2 Trends in the abundance of introduced species, notably in risk areas
	2.2. The impact of non-indigenous particularly invasive species on ecosystems is limited	2.2.1 Ecosystem impacts of particularly invasive species
		2.2.2 Ratio between non-indigenous invasive species and native species in some well studied taxonomic groups

Ecological Objective 3 - Harvest of commercially exploited fish and shellfish

Ecological Objective	Operational Objectives	Indicators
Populations of selected commercially exploited fish and shellfish⁷ are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock	3.1 Level of exploitation by commercial fisheries is within biologically safe limits	3.1.1 Total catch by operational unit ⁸
		3.1.2 Total effort by operational_unit
		3.1.3 Catch per unit effort (CPUE) by operational unit
		3.1.4 Ratio between catch and biomass index (hereinafter catch/biomass ratio).
		3.1.5 Fishing mortality
	3.2 The reproductive capacity of stocks is maintained	3.2.1 Age structure determination (where feasible)
		3.2.2 Spawning Stock Biomass (SSB)

⁵ The term non-indigenous refers to an organism that may survive and subsequently reproduce, outside of its known or consensual range. Non-indigenous may be further characterized as un-established or vagrant, established, invasive and noxious or particularly invasive. Occhipinti-Ambrogi and Galil (2004). Marine Pollution Bulletin 49 (2004) 688–694. doi:10.1016/j.marpolbul.2004.08.011

⁶ The list of priority (indicator) species introduced by human activities will be derived by consensus, based on information from the CIESM Atlas of Exotic Species in the Mediterranean and the DAISIE project (European Invasive Alien Species Gateway) a database tracking alien terrestrial and marine species in Europe

⁷ The choice of indicator species for collecting information for Ecological Objective 3 should be derived from fisheries targeting species listed in Annex III of Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (species whose exploitation is regulated) and the species in the GFCM Priority Species list (<http://www.gfcm.org/gfcm/topic/166221/en>). Choice of indicators should cover all trophic levels, and if possible, functional groups, using the species listed in Annex III of SPA and/or, as appropriate the stocks covered under regulation (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy

⁸ Operational unit is “the group of fishing vessels which are engaged in the same type of fishing operation within the same Geographical Sub-Area, targeting the same species or group of species and belonging to the same economic segment”

Ecological Objective 4 - Marine food webs

Ecological Objective	Operational Objectives	Indicators
Alterations to components of marine food webs caused by resource extraction or human-induced environmental changes do not have long-term adverse effects on food web dynamics and related viability	4.1 Ecosystem dynamics across all trophic levels are maintained at levels capable of ensuring long-term abundance of the species and the retention of their full reproductive capacity	4.1.1 Production per unit biomass estimates for selected trophic groups and key species, for use in models predicting energy flows in food webs
	4.2 Normal proportion and abundances of selected species at all trophic levels of the food web are maintained	4.2.1 Proportion of top predators by weight in the food webs
		4.2.2 Trends in proportion or abundance of habitat-defining groups
		4.2.3 Trends in proportion or abundance of taxa with fast turnover rates

Ecological Objective 6 - Sea-floor integrity

Ecological Objective	Operational Objectives	Indicators
Sea-floor integrity is maintained, especially in priority benthic habitats ⁹	6.1 Extent of physical alteration to the substrate is minimized	6.1.1 Distribution of bottom impacting activities ¹⁰
		6.1.2 Area of the substrate affected by physical alteration due to the different activities ¹²
	6.2 Impact of benthic disturbance in priority benthic habitats is minimized	6.2.1 Impact of bottom impacting activities ¹² in priority benthic habitats
		6.2.2 Change in distribution and abundance of indicator species in priority habitats ¹¹

⁹ e.g. coastal lagoons and marshes, intertidal areas, seagrass meadows, coralligenous communities, sea mounts, submarine canyons and slopes, deep-water coral and hydrothermal vents

¹⁰ e.g. bottom fishing, dredging activities, sediment disposal, seabed mining, drilling, marine installations, dumping and anchoring, land reclamation, sand and gravel extraction

¹¹ Indicator species to be used to assess the ecosystem effects of physical damage to the benthos could refer to disturbance-sensitive and/or disturbance-tolerant species, as appropriate to the circumstances, in line with methodologies developed to assess the magnitude and duration of ecological effects of benthic disturbance.

Objective of the assignment

The objective of the assignment is to provide support to UNEP MAP Coordinating Unit, PAP/RAC and EcAp-MED Project team in delivering of the EcAp-MED Project, through substantive support and facilitation during expert discussion on methodologies, targets, indicators and thresholds for Ecological Objectives 1, 2, 3, 4 and 6 of the EcAp process for the Mediterranean.

TASKS

The Thematic Expert will be responsible for the tasks listed below:

- Producing the necessary pre and post meeting documents of the Biodiversity and Fisheries Cluster of Correspondence Group on GES and targets, in English. It is expected that the Consultant will prepare three documents:
 - Information document on existing targets for the Ecological Objectives 1, 2, 3, 4 and 6, regarding relevant references within the framework of UNEP/MAP Barcelona Convention, its Protocols and other Regional conventions, strategies and as such;
 - Working document on approaches for definition of GES and setting targets for the Ecological Objectives 1, 2, 3, 4 and 6 in the framework of the Ecosystem Approach; and,
 - The Final Report of the Biodiversity and Fisheries Cluster of Correspondence Group Meeting;
- Facilitating the Biodiversity and Fisheries Cluster and if necessary, providing support to the UNEP MAP Coordinating Unit and SPA/RAC during Correspondence Group meetings or any other additional consultation that may take place;
- Drafting the minutes of the meeting of Biodiversity and Fisheries Cluster of Correspondence Group and compiling the outputs, deliver the final report to UNEP MAP Coordinating Unit and SPA/RAC for clearance;
- Facilitating the email discussions that might be needed as a follow-up consultation process towards reaching consensus on the list of core targets to meet the Ecological Objectives; and,
- With the support of UNEP MAP Coordinating Unit and SPA/ RAC, preparing the documents for submission to EcAp Coordination Group, MAP FPs and COP 18.

1.2 Qualifications / special skills or knowledge

- Postgraduate degree in marine biology, fisheries, environmental sciences, international relations, business administration, economics, engineering or in a related field
- Very good command of both written and spoken English. Knowledge of French is an asset.
- At least 10 years of professional working experience
- At least 5 years of proven experience in biodiversity and fisheries related work with additional knowledge on Mediterranean and EU processes (MSFD and similar related EU directives)
- Working experience with government agencies, civil society, local administrations, and international organizations in subjects related to Biodiversity and Fisheries issues

1.3 Outputs (Final results)

- The Information Document prepared on existing targets for the Ecological Objectives 1, 2, 3, 4 and 6, regarding relevant references within the framework of UNEP MAP Barcelona Convention, its Protocols and other Regional or Global conventions, strategies and as such;
- The Working Document prepared on approaches for definition of GES and setting targets for the Ecological Objectives 1, 2, 3, 4 and 6 in the framework of the Ecosystem Approach;
- The Biodiversity and Fisheries Cluster of Correspondence Group meeting successfully facilitated;
- The Draft Meeting Report of Biodiversity and Fisheries Cluster of Correspondence Group prepared;
- The email discussions that might be needed as a follow-up consultation process towards reaching consensus on the list of core targets to meet the Ecological Objectives successfully facilitated;
- The Final Meeting Report of Biodiversity and Fisheries Cluster of Correspondence Group prepared; and,
- A document on GES and targets (for those that data would be available and subject to agreement by the Contracting Parties) prepared, submitted to the EcAp Coordination Group for its approval before submission to the Contracting Parties meeting in 2013 (with the support of UNEP MAP Coordinating Unit and SPA/RAC).

1.4 Ultimate result of services

The consultant's support will facilitate the process towards an agreement on definition of related GES and targets through consultations, and, contribute to the preparation of relevant documents and reports to UNEP/MAP bodies.

1.5 Legislative authority reference

- UNEP/MAP Programme of work 2012-2013
- Decision IG.20/4 "Implementing MAP ecosystem approach roadmap"
- The activities detailed in the project document of the "EcAp MED - Implementation of the Ecosystem Approach (EA) in the Mediterranean by the Contracting parties in the context of the Barcelona Convention for the Protection of the Marine Environment and the Coastal region of the Mediterranean and its Protocols", approved by EU in April 2012. (The implementation of the programme of work on the Ecosystem Approach has been supported by EU through DG Environment, which falls under the Project of the ENRTP Strategic Cooperation Agreement (SCA) between UNEP and EU.)

1.6 Title and identification number of programme / project

“EcAp MED - Implementation of the Ecosystem Approach (EA) in the Mediterranean by the Contracting parties in the context of the Barcelona Convention for the Protection of the Marine Environment and the Coastal region of the Mediterranean and its Protocols”, ECL-2322-2G70-2664-1210

1.7 Duration

The consultancy services will be provided in part-time basis. Total duration of the consultancy is 25 man/day over a period of 12 months of Correspondence Group work, starting upon signature of the Contract.

2. Funding

ECL-2322-2G70-2664-1210

Indicative level of remuneration

The consultancy services will be at P3 level. Total duration of the consultancy is 25 man/day over a period of 12 months of Correspondence Group work, starting upon signature of the Contract.

3. Travel involved

Travel will be undertaken in accordance with the needs identified in the course of project implementation in line with the work plan and upon written approval (authorization). The consultant will follow the UNEP travel guidelines for travel arrangements (where the cheapest economy class and most direct routes should be adopted). The Official duty station will be considered as Consultant’s town of residence. Itineraries will be determined from the consultant’s town of residence to the identified meeting venue. The travels will be subject to adjustment upon the clarification of the town of residence of the selected consultant, the mission to countries and approval of UNEP/MAP administration. Travel is covered separately.

Travel will be organized by Substantive Office Selected candidate

4. Workplan

#	Outputs	1	2	3	4	5	6	7	8	9	10	11	12
1	The Information Document prepared on existing targets regarding Biodiversity and Fisheries (6 days)												
2	The Working Document prepared on approaches for definition of GES and setting targets (6 days)												
3	The Biodiversity and Fisheries Cluster of Correspondence Group meeting successfully facilitated (3 days)												
4	The Draft Meeting Report of Biodiversity and Fisheries Cluster of Correspondence Group prepared (2 days)												
5	The email discussions that might be needed as a follow-up successfully facilitated (2 days)												
6	The Final Meeting Report of Biodiversity and Fisheries Cluster of Correspondence Group prepared (2 days)												
7	A proposal on GES and targets prepared, to be submitted to the EcAp Coordination Group (4 days)												

Installments

- Upon completion of # 1 and 2 of workplan – 25%
- Upon completion of # 3, 4, 5 and 6 of workplan – 50%
- Upon completion of # 7 of workplan – 25%

Reporting lines

The contractor will report to EcAp-MED Project Manager and UNEP/MAP Programme Officer, under the general guidance of the Executive Secretary.

To apply, please submit the following documents on or before 23 November 2012, by email to sylvie.fortin@unepmap.gr with cc to natalie@unepmap.gr:

1. CV in the United Nations standard form – [Personal History Form - P11](#) (and [Employment Record Supplementary sheet](#), if needed),
2. academic certificates,
3. the completed "[Fields of Expertise](#)" form,
4. any other document which is relevant

All applications will be treated with the strictest confidentiality.