

TERMS OF REFERENCE FOR THE PROVISION OF CONSULTANCY SERVICES

Provision of a cost effectiveness analysis for the implementation of a monitoring network for climate change impact on biodiversity within SPAMIs

Background

The "Marrakesh Declaration" adopted on 4 Nov. 2009 by Ministers of Environment and Heads of Delegation agreed to "*Implement effective coordination to ensure the integration of climate change issues into development policies with the aim of achieving the Millennium Development Goals and the objectives of the MSSD, and ensure the strengthening of cooperation for the sharing of experience in the field of surveillance (early-warning systems) and the development and implementation of adaptation and risk-management strategies*".

The Regional Activity Centre for Specially Protected Areas (SPA/RAC) was designated as the Lead Agency for the "Strategic Action Programme for the Conservation of Biological Diversity (SAP BIO) in the Mediterranean Region". The finalised SAP BIO includes principles, approaches, measures, targets, timetables and priorities for action to conserve biodiversity in the Mediterranean region. The SAP BIO analyses issues and identify actions at national and regional level. The SAP BIO was updated regarding climate change priority issues in 2009. Within the climate change actions envisaged, also priorities related to the promotion and better management of protected areas and monitoring to assess nature and impacts of CC on marine and coastal biodiversity were considered.

Climate change has arisen as a major social and environmental concern because of its potentially serious and multiple impacts. Despite its importance for biodiversity conservation, little is still known about the real impacts of climate change on Mediterranean coastal and marine biodiversity at all levels. Scientists and research programmes are providing better information for conservation, but are not yet focused enough on conservation delivery. Biodiversity conservation should include ecosystem structure and function at all levels.

That is why obtaining and monitoring information on the expected most affected species and ecosystems as well as joining efforts with existing programmes remains a crucial issue for mitigation and adaptation. In this sense, marine protected areas in the Mediterranean can play an important role as «monitoring spots» where the effects of climate change can be studied and evaluated and where management strategies to adapt to, mitigate and, whenever possible, counter such negative effects can be developed.

With reference to sustainable development goal 14¹ and particularly its targets 14.2² and 14.5³, and Aichi biodiversity target 11⁴, the mission of SPA/RAC includes the implementation of the Strategic Action Programme for the Conservation of Biological Diversity (SAP BIO) in the Mediterranean Region and including actively supporting the Mediterranean countries, since 2008, in developing a Mediterranean marine and coastal protected areas network through the boosting, development and strengthening of effective SPAMIs establishment and management.

With the objective of allowing the wide scale analysis of changes in Mediterranean ecosystems generated by the threats provoked by climate change, its impact needs to be monitored in Mediterranean MPAs through indicators specific to this region; to achieve that, a monitoring network for climate change impact on biodiversity within SPAMIS needs to be developed with shared standardized selected indicators

Regarding the region's monitoring capacity, challenges that have been identified by the UNEP/MAP "Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas" include: The need to develop or enhance specific national programmes for monitoring climate variability and change with an integrated and standard approach for collecting, storing, quality controlling and disseminating of climate observation data; The general inadequacy of systematic observation networks (including infrastructure issues, limited coverage, insufficient coordination between authorities); The need for data sharing agreements and protocols; Low availability and insufficient robustness of data on socioeconomic and biophysical changes; Limited use for monitoring of climate change impact indicators.

One of the future objectives identified in that Adaptation Framework is the need to establish a monitoring network of sampling sites, preferably within the system of Mediterranean Marine Protected Areas, to measure biodiversity variables linkable to climate change. Furthermore, MSSD Flagship Initiative under Objective 4 (Climate Change), aims at building a relevant Science Policy Interface on Climate Change in the Mediterranean.

A. Objectives

In order to develop of a monitoring network within SPAMIs for climate change impact on biodiversity based on the harmonized vulnerability and impacts indicators for biodiversity developed by SPA/RAC and socioeconomic indicators related to climate change impact developed by PLAN BLEU, it is needed to estimate the costs of its implementation, considering particularities of different areas of the Mediterranean, so the Contracting Parties can calibrate the implications of engaging in such long term process.

¹ Conserve and sustainably use the oceans, seas and marine resources.

² By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

³ By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

⁴ By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes.

In this context, the main objective of this consultancy is to undertake a cost effectiveness analysis for developing a monitoring network within SPAMIs for climate change impact on biodiversity. The activities planned under these Terms of Reference will be followed by two UNEP/MAP Regional Activity Centres, SPA/RAC and PLAN BLEU. The activities will be as much as possible implemented in close harmonisation with the ones set in PLAN BLEU terms of reference (<http://planbleu.org/en/marches-et-contrats>) entitled: "Develop indicators of climate change impact on socio-economic trends linked to biodiversity and natural resources".

Experts are invited to collaborate. They have the possibility and are encouraged to present a common offer.

B. Assignment and linked outputs

For the completion of this consultancy, with an estimated allocation of 25 full workdays, the Consultant(s) shall:

1. Prepare a desk study to determine the yearly full costs of measuring the five climate change vulnerability and impacts indicators for biodiversity developed by SPA/RAC⁵, in a sample of SPAMIs located in each of the four different ECAP process subregions of the Mediterranean (Adriatic, West, Central and East Mediterranean)
2. Prepare a desk study to determine the yearly full costs of measuring the three socio-economic indicators on impact of climate change on biodiversity and natural resources related to the main issues in each of those SPAMIs, developed in a parallel study by PLAN BLEU (<http://planbleu.org/en/marches-et-contrats>).
3. Analyse several alternatives for climate change monitoring at different scales of investment in relation to the related results expected, considering combinations of different sets of the above indicators (up to five indicators, but not less than three ones) and different methodological approaches to measure them.
4. Elaborate a final report, (30 pages in a format to be provided by SPA/RAC), with the results of the above work, including technical advice on the most cost effective alternative.

C. Time Schedule for Outputs and Reporting delivery

The Consultant(s) shall prepare and submit in due time the respective outputs to SPA/RAC according to the table here below:

⁵ CC Indicators:

- SST and thermal stratification
- Mortality and bleaching events
- Range shift of alien / temperature-sensitive species
- Reproduction and breeding date of selected species, including flowering of *Posidonia oceanica* where present
- Episodic species outbreaks (blooms)

- **Time Schedule**

#	Deliverables	Date of delivery
1	Brief report on the ongoing desk study on yearly full costs of measuring the climate change indicators in SPAMIs from each of the four different ECAP subregions	November 11, 2019
2	Brief report on analysis of alternatives for climate change monitoring at different scales of investment	November 21, 2019
3	Detailed final report with the results of the above work, including technical advise on the most cost effective alternative based on analysis.	December 6, 2019

All the work and tasks (including preparation and delivery of the reports), envisaged in the present document, shall be completed by 20 December 2019. The contract will be terminated upon the submission by the Consultant(s) of all reports and proofs of successful outputs finalisation, as well as clearance through certification by SPA/RAC that the performance of the duties and the work carried out are satisfactory. Timely completion of the actions envisaged will lead to payment of the totality of the contract sum agreed upon acceptance of all the outputs finalisation and its appropriate quality by RAC/SPA.

Within that timeframe, the Consultant(s) shall organise the work in the best possible manner to ensure the successful completion of the consultancy.

Reviewers

Documents will be shared and discussed by SPA/RAC with a PLAN BLEU correspondent.

Reporting Language

The reporting language is English.

D. Qualifications Requirements

Eligibility Criteria

The following terms would constitute the ideal profile of the candidate(s) to fulfil the requested tasks:

- Postgraduate degree in environment, sociology, socio-economy, economic sciences or a combination of the above.
- Good knowledge of climate change, indicators and monitoring, preferably in MPAs.
- 7 years' experience on indicators, preferably in the Mediterranean, including indicators of impacts on biodiversity and indicators on economic sectors depending on the good biodiversity / environmental status.
- Successful experiences in undertaking and moderating stakeholder consultation exercises (interviews, workshops, seminars).
- Professional skills in analysis, synthesis, and confirmed writing skills
- Very good command of both written and spoken English and French
- Availability to travel. Sufficient availability and flexibility from September to December 2019.

The selection of the consultant(s) will be done based on the presentation of a detailed letter of interest making reference to fulfilment degree of the above Terms of Reference, CVs referring relevant work, and a methodological note.

The submission must contain:

1. The letter of interest
2. The CV of the expert(s) (signed/initialled by the expert on every page of the CV) to be in charge to carry out the study with qualifications, experience and references regarding similar studies (including copies/certificates of university diploma(s))
3. A methodological note including: the context of the study, understanding of the terms of reference, objectives of the assignment, detailed methodology, composition of the team of experts and responsibilities of its members if more than one. The methodology should describe the sequence and steps/tasks of the mission, and expected results/deliverables; and
4. A detailed time schedule the consultant (s) intend(s) to apply to fulfil this mission.

Applicants are encouraged to send references of previous works completed on subjects relevant to the consultancy, and send relevant documents by email if those cannot be easily found online.

The selection process may include interviews (through Skype or phone), as well as a pre-selection phase followed by requests for complementary information / negotiation if required.

E. Contracts' requirements

The consultant(s) must prove the legal capacity to sign contracts and issue invoices according to the respective country legislation of fiscal residence. The following administrative documents should be included:

For individual consultants:

- Document certifying the ability to practice this profession (registration certificate, for example) according to the legislation of their country with the tax number on it.
- A sworn statement that the bidder is in no situation that could in any way be incompatible with the mission or compromise independence in carrying out the mission.

For consulting firms:

- Document justifying the registration as a company in their country, with the tax number on it.
- A tax certificate, valid on the bid submission date, proving that the bidder has no outstanding tax obligations.
- A statement delivered by the social security body to which the provider is affiliated stating that all dues have been paid and which is valid on the date of submission.
- A sworn statement or a non-bankruptcy certificate valid on the bid submission date.

- A sworn statement that the bidder is in no situation that could in any way be incompatible with the mission or compromise independence in carrying out the mission.
- A sworn statement from each of the members of the work team, who are not staff members, confirming that they are willing to participate in the work team to carry out this mission.

Should any administrative documents be missing, the consultant(s) will be contacted to complete the bidding documents. If after a period of 5 days, the documents are still not complete the candidate will be rejected even if already chosen as best positioned.

SPA/RAC will make no payment and no reimbursement of expenses related to the preparation of proposals.

Grouping

For the case of grouped proposals (within the meaning of this document, consulting firms, firms and individual consultants offering to undertake the services together), they will be considered as solidarily grouped towards outputs and will sign a single contract. They will submit together the requested documentation which would have separately applied accordingly, as above.

Applications must be submitted through email to Mr. Daniel Cebrian, SAP BIO Coordinator at SPA/RAC daniel.cebrian@spa-rac.org with copy to car-asp@spa-rac.org

The deadline for submission is: 30th September 2019

F. Expected Outcomes

Contracting Parties to the Barcelona Convention have available appropriate information on several alternatives for climate change monitoring in SPAMIs, at different scales of investment.

G. Geographical scope of the assignment

The Consultant(s) will perform the assignment office/home based, while fluent communication with SPAMI managers will be needed.

H. Travel arrangements

The Consultant(s), in close liaison with SPA/RAC, shall be responsible for the organisation and own cost payment of any mission s/he may decide to undertake for meeting SPAMI managers, including booking and payment of his/her flight ticket and accommodation as well as getting any necessary entry visa. SPA/RAC will facilitate the necessary technical contacts in such case. Prior to departing on mission, the Consultant(s) shall provide SPA/RAC with his/her travel arrangements (including itinerary and hotel accommodation).