

## TERMS OF REFERENCE (ToR)

### for a contractor to prepare a vulnerability, attractiveness and suitability assessment for the coastal area of Montenegro

#### Scope & Duration

This ToR refers to the tasks related to the preparation of the Integrated Coastal Zone Management Strategy and Plan (i.e. the ICZM Strategy and Plan) for Montenegro, being one of the key requirements of the ICZM Protocol. This ToR falls under the **CAMP Montenegro**.

Duration: December 2012 - May 2013

#### Background

The Coastal Area Management Programme (CAMP) of the Mediterranean Action Plan (MAP) is a “country-driven” programme aimed at helping the Mediterranean countries in their efforts towards sustainable development. The activities of the programme are concentrated in the coastal areas of Mediterranean countries. The interested country is proposing each project, and when it is being adopted by the Contracting Parties (CP) at their biannual meetings, the preparatory activities could start. The projects are being developed by the local and national experts with the assistance of MAP and its Regional Activity Centres (RACs), each one of them being involved in the activities falling within its area of expertise. The Priority Actions Programme Regional Activity Centre (PAP/RAC) is co-ordinating MAP efforts in each CAMP project. Since 1989, when the programme was approved by CPs, fourteen projects have been implemented, the Montenegrin project being the sixteen.

Following a request presented by the Government of Montenegro, the Contracting Parties to the Barcelona Convention approved the decision to carry out the Coastal Area Management Programme (CAMP) Project for Montenegro at their 14th Ordinary Meeting held on 8 – 11 November 2005 in Portoroz, Slovenia. The decision to start with the initiation of the CAMP Montenegro was adopted at the meeting in Split, on 18 – 19 December 2006. The Feasibility Study (FS) was prepared in the period December 2007 – May 2008. Based on the findings of the FS and subsequent developments, as well as on discussions with the Ministry of Spatial Planning and Environment (MSPE) and other relevant national institutions held in February 2010, a draft CAMP Project Agreement was prepared.

As a result of meetings that took place on 25-26 June 2010 (with representatives of MSPE) and on 10 February 2011 in Podgorica (with representatives of the Ministry of Sustainable Development and Tourism - MSDT) a number of pre-CAMP activities took place. These included the preparation of an analysis of the implementation of Art.8 of the ICZM Protocol to the spatial planning system in Montenegro and the preparation of expert guidelines for the Terms of Reference for the Montenegrin Coastal Area Spatial Plan (CASP). These assessments, as well as changes in terms of institutional and legislative framework for implementing the national environmental and spatial planning policy, led toward necessary redefinition of the CAMP activities to be fully tailor-made for the ICZM Protocol implementation. The CAMP Agreement was signed on 30 May 2011 in Budva. The implementation of the project is envisaged to last between June 2011 and December 2013, while the implementation of post Project activities is envisaged for 2014.

The CAMP Montenegro Project area is the entire coastal zone comprising six coastal municipalities – Herceg Novi, Kotor, Tivat, Budva, Bar and Ulcinj – with the total surface of 1,591 km<sup>2</sup> and internal waters and territorial sea with the surface of around 2,500 km<sup>2</sup>. Some of the typical natural features of the coastal area include: a diversified geological composition and complex geo-tectonic structure; plain coastal areas / fields and beaches; steep elevations of Orjen, Lovcen and Rumija mountains (which separate the area from the central part of Montenegro); short watercourses flowing into the sea, dividing the region into small geo-morphological units; and the exquisite Bay of Boka with several smaller bays. According to the relevant spatial plans, the total length of the mainland seashore is 288,2 km (out of which 105,5 km in the Bay of Boka). The islands' shores are 25,6 km long, while the length of the shore along the river Bojana is 22,8 km. Only 20% of the coastal sea, next to low sandy beaches and accessible rocky shores, is relatively shallow with a sandy and pebble bottom suitable for bathing.

The CAMP Montenegro Project is based on an integrated approach to marine, coastal and river basin environment and development problems. This emphasises that project activities will cut across protection and development problems, harmonise public sector priorities and private sector pressures, and provide an integrated strategy for the common goal of achieving development in the region within a sustainable management policy framework. The main goals of the CAMP Montenegro are: a) to create necessary mechanisms that can help achieve sustainable development of the coastal area; b) to support implementation of national policies and the ICZM Protocol; c) to promote integrated and participatory planning and management in the coastal area; d) to build national and local capacities for ICZM and raise awareness of the importance of the coastal area, complexity and fragility of its ecosystems and of the need for integrated approaches in managing them; and e) to facilitate the transfer of knowledge on ICZM tools and approaches.

## Nature and Objective of the Assignment

Based on the inputs from sectoral experts (health; habitats and flora; surface, ground and marine waters; soil; seismic; landscape; climate change) the coastal vulnerability, attractiveness and suitability assessments will be undertaken.

The most important step of these analyses is describing the nature of interactions between human action and natural processes in a form which is applicable for further processing and useful in the spatial planning process. This step is called "suitability modelling" and can be to a different extent formalized and quantified. Suitability modelling involves: identification (and mapping) of spatial characteristics (factors) which are relevant for concerned land uses, description of their interrelation (value) for individual land uses, mapping the values and overlay of value maps (definition of aggregation function).

Criteria for evaluating **suitability** can be roughly divided according to two basic value systems – developmental and conservative. Developmental interest is described by opportunity (**attractiveness**) criteria. These reveal favourable conditions for land use, which can be expected to improve its output (such as vicinity of infrastructure in case of industry, fertile soils for agriculture, etc.). Limitation (**vulnerability**) criteria on the other hand represent the need for protection and reveal the conditions, which may trigger increased environmental impacts in case of land use (i.e. vicinity of housing for industry or ground water reservoirs for agriculture).

The main objectives of the activity are:

- To support preparation of the Coastal Area Spatial Plan (as part of the ICZM Plan preparation).

- To evaluate the vulnerability and attractiveness of the CAMP area (six coastal municipalities) in accordance with the methodology used by the PAP/RAC. A general assessment of the entire CAMP area shall be performed, focusing on obtaining objective criteria for deciding the site of a specific territorial intervention and determine impacts associated to different activities/land use.
- To prepare proposals to facilitate decision-making with respect to the prioritised problems, above all by identification of areas with conservation or development priority, optimization of land use and preparation of guidelines for technological improvements of activities/land use in a way to enlarge effectiveness and mitigate environmental impacts.
- To provide capacity building on vulnerability modelling to Montenegrin CAMP and CASP teams.

Specific attention could be given at the identification of values in a specific area such as parts of a narrow coastal zone.

## Key tasks

Key tasks envisaged under this ToR include:

- Adaptation of the PAP/RAC methodology to the project requirements;
- Description of the methodology used;
- Guiding and co-ordinating sectoral experts in providing inputs for the overall assessment;
- Vulnerability modelling (for the entire CAMP area and for the selected narrow part of the coastline) and interpretation of results;
- Attractiveness modelling (for a selected activity) and interpretation of results;
- Integration of results; final interpretation of the findings with suitability recommendations;
- Mapping the results, in an appropriate GIS format, compatible with the overall vulnerability assessment.

## Deliverables

1. General vulnerability assessment, with maps, interpretation of results and general recommendations;
2. Detailed vulnerability assessment for the selected narrow coastal area, with maps, interpretation of results and general recommendations;
3. Attractiveness assessment for the selected activity, with maps, interpretation of results and general recommendations;
4. Integrated report, with guidelines for suitability distribution of land uses;
5. Complete data base with metadata. All the data should be delivered in raster and shape files;
6. Related power-point presentations (and other materials, if relevant) used and presented at the meetings.

Based on the request of Montenegrin authorities, all outputs shall be delivered in Montenegrin language with the executive summary in English.

## Qualifications

The contractor should have expert(s) with the following educational and professional qualifications:

- Senior professional level with a minimum of ten years experience in vulnerability assessment, preferably in the Adriatic region;
- Recognised degree in landscape assessment; preference for PhD level;
- Ability to analyse issues and information and prepare briefs and summaries on key ideas;
- Strong research skills, combined with superior communication and interpersonal skills;
- Knowledge and experience in using PAP/RAC vulnerability/suitability methodologies is an advantage;
- Strong skills in Montenegrin language (Bosnian, Croatian or Serbian are equally accepted), both in written and oral format; knowledge of English will be an advantage.

## Responsibilities and communication

The contractor will work under the direct supervision of the PAP/RAC and General Co-ordinator of the CAMP and ICZM Strategy (on behalf of the Ministry of Sustainable Development and Tourism). The expert will consult and work in collaboration with the sectoral experts engaged in the project, in co-ordination with the General Co-ordinator.

## Outputs and Deadlines

Outputs	Deadline
1. Draft deliverable 1	30 December 2012
2. Draft deliverables 2 and 3	30 January 2013
3. Draft deliverable 4	30 March 2013
4. Final deliverables 1-5	30 May 2013

## Costs & Remuneration

For the execution of tasks defined by this ToR, the contractor will be remunerated by a fee of Euro 20.000. Travel and accommodation costs pertaining to meetings to be attended and the field work fall under responsibility of contracting institution (PAP/RAC).

The payments will be made on an output delivery basis, upon submission of outputs defined in point above, subject to clearance of the General Co-ordinator and clearance by PAP/RAC, as follows:

Instalments	Payments,
First instalment, advanced payment	20%
Second payment, upon clearance of the outputs 1 and 2	70%
Final payment, upon clearance of the outputs 3 and 4	10%