PRIORITY ACTIONS PROGRAMME REGIONAL ACTIVITY CENTRE

SPLIT, KRAJ SV. IVANA 11

# INVITATION TO TENDER

PROCUREMENT SUBJECT: Consultant to assess land cover change in Lebanon in the frame of the GEF MedProgramme Child project 2.1

SIMPLE PROCUREMENT

Reference number 20/GEF/2022

Split, December 2022

**1. GENERAL INFORMATION**

**1.1. Client information:**

**Nam**e: Priority Actions Programme Regional Activity Centre – PAP/RAC – UNEP/MAP (hereinafter: the Client)

**Registered office - address**: 21000 Split, Kraj Sv. Ivana 11

**Telephone number**: +385 (21) 340470

**Website**: [www.paprac.org](http://www.paprac.org)

1. **Contact person:** Questions concerning the tender contents and format can be sent to the person in charge of communicating with Tenderers, Daria Povh Škugor, e-mail: daria.povh@paprac.org
2. **Procurement type:** Simple procurement
3. **Estimated duration:** Expected contract duration is four month.
4. **Estimated procurement value:** Procurement value is estimated at USD 10.500 gross.

**2. INFORMATION ON THE PROCUREMENT SUBJECT MATTER**

**2.1. Introduction**

Adopted in January 2008 by the Contracting Parties (CPs) to the Barcelona Convention, the **Mediterranean ICZM Protocol** is the first supra-state legal instrument aimed specifically at coastal zone management. In Lebanon it entered into force in August 2017. As Mediterranean coastal zones have been on an unsustainable development path for the last few decades, the application of this new legal tool is of vital importance for the future of the Mediterranean basin.

**GEF MedProgramme Child Project 2.1** provides support to the countries for ratification and implementation of the ICZM Protocol. The goal of this work is to enable favourable conditions for the implementation of the ICZM Protocol in various fields ranging from the legal framework to capacity building (administrative and legal staff, etc.), the use of planning documents (cadastres, land use plans, MSP, etc.) and the integration of climate change issues in planning and ecosystem protection decisions. This invitation to tender for contractor consist in applying the upgraded methodology for Candidate Common Indicator on Land cover change of the Integrated Monitoring and Assessment Program (IMAP) of the UNEP/MAP Ecosystem Approach (EcAp) initiative on Lebanese coastal zone. This task is a part of the Activity 1.1.1. Development of the materials for the consultations in support of ICZM Protocol ratification/implementation.

The upgraded LCC indicator aims to support implementation of the ICZM Protocol, particularly related to the understanding risks affecting the coastal zones, preserving open coastal space, securing setback zone, avoiding urban sprawl by limiting linear extension of urban development including transport infrastructure along the coast, securing balanced allocation of uses and ecosystem health. These objectives are among the most important ones of the ICZM Protocol. Being a Candidate Common Indicator, the land cover indicator is still in a testing phase. In the framework of CP 2.1 PAP/RAC team of experts reviewed and updated the initial methodology of this indicator developed in 2017 and included the data on elevation so to adapt this indicator to be used for rapid identification of the coastal flooding risks. Having in mind that the satellite imageries and the open data policy has changed since 2017., the methodology of calculating the indicators was considerably upgraded and updated. PAP/RAC, assisted by its expert group, will guide and supervise the quality of desired outputs of this task.

This procurement is fully funded by the UNEP budget, GEF project MedProgramme Child Project 2.1, on the basis of Project Cooperation Agreement PCA/20/MAPIA2938 between UNEP and PAP/RAC. This procurement is carried out in accordance with the Article 29 of the Public procurement law.

**2.2. Description of the procurement subject matter**

The task will consist of the following:

1. Perform analysis of the land cover change for the Lebanese coastal zone for 2020 and 2021, according to “Manual for IMAP Candidate Common Indicator 25 “Land cover change” calculation”, and in line with the “Report for the upgraded land cover change indicator 25”, both provided as a joint document to this call for offer.
2. Perform additional analysis of the land cover change for 2012 and 2018 (or another two reference years, if another years will be available for selected open source data), using the data sources indicated by the PAP/RAC Expert group
3. Participate to the training course for the calculation of the upgraded Candidate Common Indicator 25 “Land cover change” to be provided online or live (to be agreed upon signature of the contract).
4. Present the results of the above work during at least 3 national high-level meetings.
5. The consultant is expected to apply the methodology explained in the above-mentioned Manual and the Report on the Lebanese coastal zone extending to 10 km from the sea in the three coastal strips (<300m, 300m-1km, 1-10km). Having in mind that this is an upgraded and modern methodology, expert group which undertook the upgrading will be available for support and for assistance. Also, PAP/RAC expert group will approve the calculation performed by the consultant.

Consultant is expected to perform the following steps:

1. GIS Analysis
   1. Download and pre-processing of open-source data and creation of reporting units (OSM coastline, OSM administration units (municipality level), creation of coastal strips and zone, creation of reporting units as vector layer with polygon topology.
   2. Download and pre-processing of ESA WorldCover Project Land cover data sets for 2020 and 2021 year. Reclassification to CI25 land cover classes.
   3. Download and pre-processing of Copernicus DEM 30 and creation of low elevation coastal zone (LECZ) vector layer with polygon topology (contiguous to coastline).
   4. Download and pre-processing of World Database on Protected Areas (WDPA) data and creation of vector layer with polygon topology.
   5. GIS overlay of vector data (reporting units, LECZ and Protected areas) with land cover data for 2020 and 2021. Preparation of tabular data (raw data from GIS analysis) with all elements for further calculations of CI25 parameters.
2. Calculation and reporting
   1. Calculation of CI25 parameters, creation of aggregate pivot tables and graphs
   2. Interpretation of results, writing report.
   3. Creation of thematic maps illustrating results.
   4. Creation of GIS database including resulting GIS layers and thematic maps.
3. Results validation
   1. Validation of input data sets and GIS overlay operations by visual inspection using aerial/satellite images from the reference year (as higher quality data).
4. Additional analysis of the change of urban within the land cover for 2012 and 2018 (or another two reference years, if another years will be available for selected open source data) in the same coastal belts as under A), is an activity which will be performed for Lebanon only. Consultant will be advised on sources to be used for this analysis upon initiation of the work. As this assessment is related only to the change of urban, consultant is expected to use the same reporting units and the LECZ layer as in the task 1, while Protected Areas data are not necessary. Other steps will remain the same.
5. GIS Analysis
6. Download and pre processing of urban cover data sets for 2012 and 2018 year.
7. GIS overlay of vector data with urban cover for 2012 and 2018. Preparation of tabular data (raw data from GIS analysis) with all elements for further calculations.
8. Calculation and reporting
   1. Calculation of urban parameters, creation of aggregate pivot tables and graphs
   2. Interpretation of results, writing report.
   3. Creation of thematic maps illustrating results.
   4. Creation of GIS database including resulting GIS layers and thematic maps.
9. Results validation
10. Validation of input data sets and GIS overlay operations by visual inspection using aerial/satellite images from the reference year (as higher quality data)
11. Due to the fact that the tasks described above involve high-level of expertise in geoinformatics and geospatial analysis and mapping, as well as in use of the latest satellite imagery, support to the consultant will be secured by the PAP/RAC expert group – methodology creators. Therefore, a training course for the calculation of the upgraded Candidate Common Indicator 25 “Land cover change” will be provided to the selected consultant. The course may be online or live, or combination of both. This will be determined upon the signature of the contract. Obtained results need to be integrated with the results for all Mediterranean counties. Therefore, it is of utmost importance that the given PAP/RAC methodology is precisely followed. Coordination, supervision and approval of the results will be provided by the PAP/RAC expert group.
12. Presentation of the results of the above work is expected during the 2nd Multi-stakeholders Consultation meeting, tentatively scheduled for February 2023. as well as during at least two additional meetings in the framework of National ICZM Strategy development (including preparatory meetings, if needed).

**2.3. Deliverables and deadlines**

The deliverables and tentative deadlines related to the activities/tasks defined in 2.2 are as follows:

|  |  |
| --- | --- |
| **Deliverables** | **Deadlines** |
| 1. Land cover assessment for 2020 and 2021    1. GIS analysis containing:       * GIS layer Reporting units       * GIS layers: Land cover 2020, Land cover 2021       * GIS layers: Copernicus DEM 30 and LECZ       * GIS layer: CI25\_units; tabular data | 6 February 2023 |
| * 1. CI25 calculation and reporting:      + Tables with calculations, pivot tables and graphs (xls format)      + Draft Report on the CI25 (word and pdf format)      + Thematic maps in pdf format      + GIS database | 20 February 2023 |
| * 1. Validation Report | 20 February 2023 |
| 1. Land cover assessment for 2012 and 2018 (or another two reference years, if another years will be available for selected open source data)    1. GIS analysis       * GIS layers: Urban land cover 2012, Urban land cover 2018    2. Urban cover change calculation and reporting       * Tables with calculations, pivot tables and graphs (xls format)       * Draft Report on the CI25 (word and pdf format)       * Thematic maps in pdf format       * GIS database    3. Validation report | 20 February 2023 |
| 1. Presenting Scoping results at the 2nd Multi-stakeholders Consultation meeting and at the Initial meeting for the preparation of the National ICZM Strategy | February 2023 (tentative) |
| 1. Final versions of the documents under 1 and 2 (a, b and c) | 17 March 2023 |
| 1. f. Executive brief of consultant’s activities in English and in Arabic language | 17 March 2023 |

The above-listed deliverables shall be written in English in an electronic form.

**3. ELIGIBILITY OF ECONOMIC OPERATORS (SELECTION CRITERIA)**

**3.1. Technical and professional capacity**

**The Tenderer shall prove it has the following qualifications:**

* Education: higher education in the field of geoinformatics or geography
* Experience: 5 years of experience in GIS
* written and oral fluency in English.

**For the purposes of establishing the grounds set out in item 3.1. of the Invitation to Tender the Tenderer shall submit the following in his Tender:**

1. *The Tenderer’s* ***curriculum vitae (CV),*** *clearly highlighting,**among others,* ***required technical and professional qualifications.***

**4. INFORMATION ON THE TENDER**

**4.1. Tender contents and format**

The Tender proposal should contain the following elements:

1. **Tender sheet** signed andfilled in according to this Invitation to Tender (Annex 1);
2. **Curriculum vitae** of the Tenderer,proving required technical and professional capacity;
3. **List of projects verifying expertise (see chapter 5) of the Tenderer**(Annex 2);
4. **Cost statement** signed andfilled in according to this Invitation to Tender (Annex 3);

**4.2. Tender format and submission**

Tender offers need to be drafted according to the requirements laid out in the Invitation to Tender.

Offers shall be sent electronically to the following e-mail addresses: [paprac@paprac.org](mailto:paprac@paprac.org) and daria.povh@paprac.org with “Lebanon – land cover change analysis” as the e-mail subject.

**4.3. Date, time and place of tender submission**

Tender offers must be received **by 19 December 2022, 1 pm CEST.**

All offers received after the bid opening deadline will be marked as late and excluded from the procedure.

* 1. **The Tenderer may amend or withdraw his Tender before the Tender submission deadline.** The amended Tender shall be submitted in the same manner as the original and clearly marked as amended. The Tenderer may withdraw his Tender by submitting a written statement before the Tender submission deadline. The written statement shall be submitted in the same manner as the original Tender and clearly marked as a statement of Tender withdrawal. Alternative Tenders are not permitted.
  2. **Tender currency:** US dollars.

The Contractor shall express the price in USD, and the payment will be made in USD.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by PAP/RAC after it has received the Proposal.

* 1. **Language and script:** The Tender shall be drafted in English language, using the Latin script.
  2. **Period of validity:** 15 days from the tender submission deadline.
  3. **Price setting method**

The Tender price includes all costs and discounts pertaining to the services indicated as the subject matter of the procurement (i.e. gross amount).

The Tender price shall be expressed in USD and written in numbers. The tender price cannot be increased.

Transport fees (airplane ticket) and accommodation expenses related to the Proposal (if any) are not included and will be covered by the Client as an additional expense.

**5. AWARD CRITERIA**

The Tender will be awarded according to the **most economically advantageous tender (MEAT) criteria**.

The following table sets out the criteria, units of measure, labels and their relative importance. They will be applied to Tenderers who satisfy technical and professional capacity criteria set in ch 3.1.The MEAT award criteria are the following:

* expertise of the Tenderer (Annex 2); and
* proposed price (Annex 3);

Determining the MEAT according to the above criteria for selecting the MEAT will be done as follows: after the Client has determined the score value by individual criteria for each Tenderer, the points awarded to Tenderer according to each of the criteria will be summed in order to obtain the total number of points for each Tenderer. The most favourable Tenderer will be the one who has earned the highest total score according to all the above criteria.

At that, the MEAT is equal to the highest total score resulting from the ranking of the Tenders; the total maximum number of points is 100.00 with the total points being calculated in two decimal places. In case that two or more Tenders achieve equal number of points, the one received earlier will be chosen. As a proof, data will be used on the order in which tenders have been received.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Criteria** | **Criteria label** | **Description and measuring unit** | **Methodology** | **Number of points** | **Maximum** |
| Price | P | The Tender price, i.e. the financial Tender amount in USD including VAT, if applicable | C = (lowest bid price/bid price being evaluated) x 30 | 30 | 30 |
| Expertise | E | Number of projects **related to** **GIS mapping and analysis in the Lebanon**, in which the tenderer was involved as the expert/coordinator | 1 - 2 | 40 | 70 |
| 3-5 | 60 |
| More then 5 | 70 |

Selection of the most economically advantageous Tenders (ENP) will determine the basis for evaluating the criteria for each individual Tender according to the delivery of the requested Tenderer's documentation, in the appropriate form: **ENP = P + E**.

PAP/RAC is committed to achieving gender balance in its expert teams. If two candidates result with the same number of points, the advantage will be given to the candidate with a view to the gender balance.

**For the purposes of establishing the grounds set out in item 5. of the Invitation to Tender the Tenderer shall submit the following in his/her Tender:**

1. ***List of projects verifying expertise of the Tenderer*** (Annex 2)*; and*
2. ***Cost statement*** *(Annex 3)*.

**6. DUE DATE, CONTRACT AND TERMS OF PAYMENT**

The Contract will be made in US dollars.

The Client shall make the payment to the Tenderer in two instalments i.e.:

* 50% upon submission and clearance by PAP/RAC of the deliverables 1, 2, and 3.
* 50% upon submission and clearance by PAP/RAC of the deliverables 4, and 5.

An advance payment by the Client is not permitted.

# Annex 1

# Tender sheet

**Tender date**:

**Contracting Authority**: Priority Actions Programme Regional Activity Centre (PAP/RAC), Kraj Sv. Ivana 11, 21000 Split, Croatia

**Subject of procurement**: Consultant to assess land cover change in Lebanon in the frame of the GEF MedProgramme Child project 2.1

**Tenderer information :**

|  |  |
| --- | --- |
| **Tenderer’s name and registered seat** |  |
| **PIN[[1]](#footnote-1)** |  |
| **Bank name** |  |
| **IBAN** |  |
| **SWIFT** |  |
| **The economic operator is VAT registered (select)** | YES NO |
| **Name, family name and position of a person / persons authorised to sign the public procurement contract** |  |
| **Name and title of the contact person:** |  |
| **Mail address :** |  |
| **E-mail address :** |  |
| **Telephone number :** |  |

**Tender price :**

|  |  |
| --- | --- |
| Tender price, gross |  |

**Bid validity date:** (at least 15 days after the bid submission deadline)

**For Tenderer:**

# Annex 2

# Practical experience verifying expertise of the Tenderer

Relevant experience of the tenderer- expert (*Name and Surname*) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, related to the GIS mapping and analysis in the Lebanon, in which the Tender was involved as a key expert/coordinator:

|  |  |  |  |
| --- | --- | --- | --- |
| No[[2]](#footnote-2). | Experience (name of the project or other type of engagement) | Role of the expert | Year |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |
| 6. |  |  |  |

In\_\_\_\_\_\_, \_\_\_\_\_\_\_ 2022.

(Full name of the applicant or legal representative)

(Signature of the applicant or legal representative)

# Annex 3

# Cost statement

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Technical description and cost statement for the Consultant to assess land cover change in Lebanon in the frame of the GEF MedProgramme Child project 2.1*** | | | | | |
| No. | Deliverable description | Unit | Approx. Amount | Unit price in USD | Total USD |
| 1. | Land cover assessment for 2020 and 2021 | Expert days | 55 |  |  |
| 2. | Urban cover assessment for 2012 and 2018 | Expert days | 23 |  |  |
| 3. | Presentation of the results | Expert days | 5 |  |  |
| 4. | Executive brief | Expert days | 5 |  |  |
| 5. |  |  |  |  |  |
| ***Tender price USD*** | | | | |  |

In\_\_\_\_\_\_, \_\_\_\_\_\_\_ 2022.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Full name of the applicant or legal representative)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Signature of the applicant or legal representative)

1. Or national identification number according to the economic operator’s country of establishment, if applicable [↑](#footnote-ref-1)
2. Add rows, as necessary [↑](#footnote-ref-2)