



# REQUEST FOR PROPOSALS

## **EARTH OBSERVATION FOR AGRICULTURE SEASONAL MONITORING, EARLY WARNING AND ASSESSMENT IN EAST AFRICA – HIGH RESOLUTION CROP MASKS DEVELOPMENT AND VALIDATION**

### **Background**

The Global Monitoring for Environment and Security and Africa (GMES & Africa) Support Programme is a joint programme co-financed by the European Commission and the African Union Commission. The Programme aims at improving African policy-makers', planners', scientists', business and private sector and citizens' capacities to design, implement, and monitor national, regional and continental policies and promote sustainable management of natural resources through the use of Earth Observation data and derived information. Specifically, the Program is designed to respond to African needs in water, natural resources, marine and coastal areas as well as address global needs to manage the environment, mitigate climate change and ensure civil security. It is further purposed to enable the implementation of the African Space Policy and Strategy, formulated to harness the continent's capabilities in utilizing space science and technology for economic growth and sustainable development.

The IGAD Climate Prediction and Applications Centre (ICPAC) was awarded a grant by the African Union Commission (AUC) to implement the GMES & Africa thema focusing on *Monitoring Natural Resources and Food Security in East Africa* region comprising 10 countries, namely: Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania, Uganda.

The Programme's Grant Agreement requires ICPAC in its capacity as consortium leader to engage private sector companies in the implementation of some of the programme's activities. Pursuant to this requirement therefore, ICPAC invites sealed bids from eligible and qualified EO and geospatial technologies private sector companies to undertake Earth Observation Based Agriculture Monitoring and Assessment in East Africa. The application aims at monitoring agricultural seasons across the crop production areas in the region and develop indicators that can be used to develop early warning information. The indicators to be developed require field information on crop types and crop yields in low, medium and high scale production areas (crop mask).

### **Objective**

The objective of this work is to engage EO private sectors in East Africa countries to enhance agricultural monitoring and food security systems at ICPAC by using the freely high resolution available EO data to develop and to enhance existing crop masks. This work seeks to improve crop masks and relate it with quantification of crop production areas in parts of the East Africa region.

**Deliverables**

- validated a high-resolution crop mask for selected EA countries
- processing chains for developing the mask
- Step by step training manual on crop mask development/validation
- Report on methodology and generated products

**Duration**

2 months

**Requirements**

Firms must meet the following **criteria**:

- Be a private company registered in at least one of the 10 eastern Africa countries
- Demonstrate at least three years' experience offering EO/geospatial products and/or services within East Africa / Africa
- Knowledge and experience in developing and validating agricultural masks
- Ability to develop crop mask using EO data
- Ability to develop crop type mask using EO data.
- Demonstrate competency in developing or using modern field survey approaches and tools.
- Capacity to implement complex and big data workflows for products and service generation.
- Demonstrate previous project experiences in the application of earth observation and geo-information in agriculture monitoring
- Certificate of registration / certificate of incorporation
- Valid tax compliance certificate
- Brief company / organization profile in narrative form
- References of similar assignments with full contact information of clients (Name of organization, name of contact person, telephone numbers and email address)
- Signed letter confirming willingness and availability to facilitate inspection of office premises by staff of ICPAC to ascertain existence of key human and infrastructural capacity, prior to concluding procurement of the contract.

**How to Apply**

Interested and qualified firms in the Region should submit the following:

1. Technical proposal:

This should provide information on key aspects of the methodology process including time frame to accomplish the task. The proposal should demonstrate that the firm understands what needs to be done, tools to be used, data collection and verification methods and products of the assignment.

2. The financial proposal should include all fees and costs necessary to undertake the assignment. Clear break down of costs should be provided.

**Proposals must be delivered to the address below on or before 13<sup>th</sup> October 2021 at 1700hours**

FINANCIAL AND TECHNICAL Bids MUST BE SUBMITTED IN TWO SEPARATE ENVELOPES enclosed in one outer Envelope. The Outer envelope should be clearly marked with the Title of the bid and Procurement Number.

For e-mail submissions, the financial proposal should be separate and password protected. Please ensure that the proposals are attached as files. The subject of the email must clearly specify the title of the Consultancy.

**The Head of Procurement**

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