ToRs for Geo-Developer Consultancy

Organization: IGAD Climate Predictions and Applications Centre - ICPAC

Project: Global Monitoring for Environment and Security in Africa (GMES and Africa)

Grade: Consultant

Duration: 1 year renewable upon satisfactory performance and availability of funds

Location: ICPAC HQ, Ngong - Kenya

Start date: ASAP

IGAD Climate Prediction and Applications Centre (ICPAC) is the Regional Climate Centre for Eastern Africa providing climate services to 11 countries. ICPAC is a specialized institution of IGAD with the mission of fostering climate services and knowledge to enhance community resilience for prosperity in the region.

ICPAC under the GMES & Africa project seeks the services of GIS-Developer consultant to support the project activities. The consultant will work closely with the EO thematic Experts and other Developers at ICPAC as well as the users in the region to develop geospatial applications and services that enhance the use of Earth Observation data and products to support decision makers and other stakeholders make informed decisions.

Key Responsibilities:

1. Design, develop, deploy and maintain geo-applications for the three services of the GMES and Africa project
2. Develop, maintain, and optimize geospatial databases, data models, and tools
3. Design and implement geospatial applications, including web mapping applications, data visualization, and analysis tools
4. Ensure the accuracy, completeness, and quality of geospatial data
5. Automate processes to streamline data acquisition, processing, analysis and dissemination; support thematic experts in automating processing chains and routine workflows

6. Design and develop tools to enhance EO data access; provide user-support for data access

7. Support development of effective information dissemination tools and products

8. Maintain and administrate the Earth Observation station and the e-station;

9. Support operationalization of the project services and develop new ideas for improving workflows within GMES & Africa project

10. Collaborate with other teams to integrate geospatial data and applications into existing ICPAC systems and workflows.

11. Keep up-to-date with emerging trends and technologies in geospatial data and applications.

12. Participate in the capacity building plan and activities of the project

13. Prepare periodic progress reports showing achievements against planned targets and providing justification for performance gaps

Required Qualifications and Experience:

- Bachelor's or Master's degree in Computer Science, Geo-Informatics, Geographic Information Science, or a related field.

- Minimum of 3 years of experience in geospatial data and application development.

- Proficiency in GIS software such as ArcGIS, QGIS, or GeoServer.

- Strong analytical and programming skills in Python and/or R, to automate geo-processing/large data workflows

- Knowledge of geospatial data formats, standards, and protocols.

- Experience with database management systems such as PostgreSQL or Oracle.

- Sound knowledge of SQL and PostGIS spatial database;

- Experience manipulating and analyzing Earth Observation data in different data formats is desirable

- Proven experience designing and developing production ready scalable geospatial web applications with open-source industry standard technologies such as Node.js, React, Mapbox GL, Leaflet, Carto, python, Geoserver, Mapserver, GDAL,

- Candidates should demonstrate their qualifications and proficiency in web application development and geo-application development (provide links to at least 2 samples of previous work and/or Github code)

How to Apply

Interested candidates are encouraged to apply via email (Hard copies will not be accepted) with subject line ''Application for Geo-Developer – GMES & Africa". Applications should be received by close of business **on 9th May 2023**. Include an expression of interest, curriculum vitae, stating relevant achievements and illustrating capacity to undertake the work to the following Address: procurement@icpac.net and gmes-ea@icpac.net . Only shortlisted companies/candidates will be contacted.