

## **Environmental Protection Agency**

# Call for Expression of Interest To Provide Technical Support to the Enhancing Climate Information System for Resilient Development in Liberia (CIS)



Job Title: Hydrology Specialist

**Division/Department** Executive **Location** Monrovia

**Expected Start Date:** December 1, 2023

**Duration:** Three (3) years (renewable based on performance)

**Report to:** Project Coordinator

#### **Background**

The Government of Liberia through the Environmental Protection Agency in collaboration with the African Development Bank (AfDB) received funding from the Green Climate Fund (GCF) to implement the project (Enhancing Climate Information Systems for Resilient Development in Liberia) otherwise referred to as CIS Project. The objective of the project is to further strengthen Liberia's climate-related observing and monitoring capabilities, early warning and early action systems, and other environmental-related information systems. It seeks to drive a paradigm shift towards evidence-based climate-informed decision-making, planning, and response. The overarching goal of the project is to integrate green growth, environmental resilience, and adaptation into national development planning through effective climate information systems.

The project will reduce exposure of Liberia's communities, livelihoods, and infrastructure to climate-induced natural hazards through a well-functioning national Multi-Hazard Impact-Based Forecasting and Early Warning System (MHIBF-EWS). A well-functioning MH-IBF-EWS means having in place trained and equipped Liberia Meteorological Service (LMS), Liberia Hydrological Service (LHS), Environment Protection Agency (EPA), the National Disaster Management Agency (NDMA) to collect weather and climate data; introduce and maintain modelling, forecast weather events and provide early warnings; scale-up evidence-based climate-informed decision-making, planning, and response actions countrywide. Having these in place will lead to transformative change in climate risk reduction and management in Liberia. This new paradigm will focus on translating meteorological and hydrological hazards into the sector- and location-specific potential impacts for the development of sectoral responses to mitigate those impacts. The project's activities will further support the design, development and implementation of strategies and actions in the country that effectively address climate change adaptation and sustainable development needs.

The Environmental Protection Agency as the National Designated Authority (NDA) and focal entity for the management of the environment and natural resources in Liberia is empowered to coordinate, monitor, supervise and consult with relevant stakeholders on all activities in the protection of the environment and sustainable use of natural resources. EPA is the Executing Entity and will head a Project Implementing Unit (PIU). The PIU will coordinate the

implementation of the project, and will consist of three technical departments (Liberia Meteorological Service, Liberia Hydrological Service and National Disaster Management Agency), Project Manager and Project Staff. The role of the three technical department is to provide technical support to the PIU. The AfDB, as an Accredited Entity to the GCF will provide oversight and quality assurance support services to the CIS. The Project Implementation Unit (PIU) will assist the implementation of the Project with support from the EPA and AfDB. The PIU staff including project manager, meteorology, hydrology, aviation and M&E specialists, and finance officer will be hosted at the EPA and will report to the Executive Director/CEO of the EPA and the AfDB Country Office. The hydrology specialist will provide technical support to the project on a daily basis.

## **Objective**

The Hydrology Specialist's primary responsibility is to support the PIU in the delivery of results specified in the Project Document, to the required standard of quality and within the specified constraints of time and cost. The hydrology Specialist will provide expert advice and technical support on the hydrological aspects of the project. He/she will be working closely with the Project Manager and project team and the Vulnerability and Adaptation Working Group — an inter-sectoral working group consisting of personnel from LHS, LMS, MoT, NDMA, LCAA, MOA, Ministry of Gender, Children and Social Protection (MGCSP), MoH, and WMO that will convene monthly to discuss progress and implementation-related issues.

## **Duties and Responsibilities**

The hydrology specialist will collect, collate and compile detailed information on hydrological network and equipment (e-infrastructure (ICT), automated weather stations, manufacturer and types of sensors, data logging and communication equipment etc.). The hydrology specialist will establish specifications of the hydrology related equipment required by Liberia to deliver fit-for-purpose climate services. The hydrology specialist will also assess the forecasting capability of the hydrological service and recommend ways of improvements through the establishment of a forecasting facility for weather and climate services (including forecast verification systems for weather and climate).

Under the supervision of the Project Manager, the Consultant will undertake the following tasks:

- Collect and compile information on the hydrological related equipment and software including type, brand/make, model and other relevant specifications
- Analysis of the state of hydrological and measuring observation networks in Liberia, including the current hydrological data management system at LHS;
- Assess the existing procedures and mechanisms in the country for the deployment of hydro-met equipment and update, if possible, to current WMO (hydrological) standard. Compile detailed information on additional equipment and software (brand/make and specifications), which may be required to ensure effective communication of data, climate services generation and delivery. Assess existing

- hydrometric stations and determine their suitability for data acquisition and determine the possibility of installing automatic stations instead of manual stations.
- Development of technical requirements and technical specifications in accordance with the Government and WMO requirements for conducting tender procedures in accordance with the Procurement Plan;
- Develop an effective operations and maintenance plan for hydrological equipment, infrastructure and forecasting facilities.
- Preparation of proposals for the training program for LHS personnel, which will
  provide an opportunity to adequately train personnel to effectively operate and
  manage the introduced technologies and equipment.
- Development of packages of tender documentation in accordance with the Procurement Plan;
- Assistance in the preparation and conduct of competitive events (participation in pre-tender conferences, answers to questions from participants, etc.);
- Participation in the evaluation of bids, including an expert assessment of the technical solutions proposed in the competition for compliance with the technical design and tender documentation, preparation of evaluation reports;
- Assistance in conducting contract negotiations with the winners of competitions;
- Monitoring the progress of the execution of contracts.
- Discuss with key stakeholders the equipment that is to be rehabilitated/procured/deployed and software that are to be updated or procured; the national needs for an effective climate information services, and
- Perform the above functions in consultation with the Liberian Hydrological Service.

#### **Deliverables**

- 1. Hydrological modernization plan for Liberian Hydrological Services to collect, process and interpret essential climate variables based on the WMO standard
- 2. Monthly, quarterly, and annual performance report
- 3. Catalogue of hydrological related equipment and software
- 4. Operations and maintenance plan for Liberian Hydrological Services

## **Required Competences**

#### **Education**

Master's degree or equivalent in hydrology, geophysics, water resources engineering and management, geosciences or other closely related technical or scientific fields of study.

### Experience

- A minimum of 5 years of progressive and relevant experience in the field of hydrology and engineering related to infrastructure and equipment on climate information and early warning systems;
- Very good experience and knowledge of sourcing of equipment and software related to hydro-meteorological network and their operations;
- Demonstrated experience in the operational practice of hydrology;

- Demonstrated knowledge of climate change adaptation and mitigation;
- Very good experience with project development, implementation or management;
- Experience in working and collaborating with government institutions and private sector
- Excellent knowledge of English including writing and communication skills
- Broad knowledge and understanding of early warning system, adaptation to climate change & climate resilience

#### **OTHER SKILLS**

- Excellent team player with good interpersonal skills
- Ability to manage workload with minimum supervision
- Ability to work under pressure and tight deadlines
- Ability to accommodate additional demands at short notice
- Ability to work in a multi-cultural environment
- Ability to communicate effectively orally and in writing English in order to communicate complex, technical information to technical and general audiences
- Displays cultural, gender, religion, nationality and age sensitivity and adaptability

#### **IMPLEMENTATION ARRANGEMENTS**

The Hydrology Specialist will be under the supervision of the Project Manager of the PIU.

#### **SUBMISSION OF APPLICATIONS**

Mr. Pescee T. Doe Assistant Manager, Procurement Unit Environment Protection Agency (EPA) 4<sup>th</sup> Street, Sinkor 1000 Monrovia, 10 Liberia P.O. Box 4024

or through email (ptdoe@epa.gov.lr), indicating Monitoring and Evaluation Specialist – CIS Closing date for applications is **4pm**, **November 15**, **2023**. Any application received after this date will not be given consideration. **Only short-listed candidates whose applications correspond to the above criteria will be contacted for an interview. This position is open to Civil Servants.**