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Project Fiduciary Management Unit – PFMU 13 Howe Street Freetown Sierra Leone

#### **GOVERNMENT OF SIERRA LEONE**

#### VACANCY ANNOUNCEMENT

Recruitment for the Positions of Data Management Specialist for the Resilient Urban Sierra Leone Project (Positions One (1)).

Sierra Leone

Resilient Urban Sierra Leone Project (RUSLP)

Grant No.: D8420-SL Project Id: P168608 Issue date: 8<sup>th</sup> July 2024

The Government of Sierra Leone has received funding from the International Development Association IDA of the Word Bank towards the preparation of the Resilient Urban Sierra Leone Project and intends to apply part of the proceeds of the funding for eligible payment under the contract for the Hiring of Data Management Specialist through the Project Fiduciary Management Unit.

The position of Data Management Specialist is a contracted full-time position. S/he will be part of the PMU team. The Data Management Specialist will be based in the RUSLP PMU Work under the overall leadership and guidance of the Project Manager. She or he will be part of the technical team in the PMU for the implementation of data management for all the components of the RUSLP. The incumbent is expected to perform as a Project Data Management Specialist to provide technical, administrative, and monitoring of spatial data, personal data, public data-sharing and capacity building and technical support to the PMU and Government Stakeholders for all components of the RUSLP.

# **Expected Tasks and Deliverables**

The Main tasks of the Data Management Specialist will include but not be limited to the following:

# Task 1: Develop an inventory and repository of all spatial data developed by the project.

Under the supervision of the RUSLP Project Manager, the Data Management Specialist will develop an inventory and repository of all spatial data developed by the project by:

- Design a digital spatial database to collect the data generated from across the project and catalogue each data set with attributes and characteristics of relevance.
- ii. Develop and implement a robust technical and business workflow for spatial and non-spatial data Management Information Systems that:
  - a) Will produce, manage, dissemination and improve spatial data management processes and procedures to enhance overall data quality and integrity

b) Manage all GIS and Database affairs for the RUSLP Project.

# Task 2: develop an open data protocol for all spatial data generated by the project

Under the supervision of the RUSLP Project Manager, the Data Management Specialist will develop an open data protocol for all spatial data generated by the project, with the intention of maximizing open data sharing.

- i. Developing a "data management and open data sharing protocol" for the project to use to ensure that a maximum amount of data is shared publicly.
- ii. Define a clear approach to secure permissions from the government to make as much data as possible fully open and available online publicly and sharing any information and data belonging to RUSLP and its partners, or collected during his/her assignment with RUSLP team members before external release making sure final data products are made available in a data sharing platform as open source;
- iii. Using a real-time open-source or low-cost spatial data management information system platform (such as MySQL, SQL Server, QGIS, TNTMiips etc.) and protocols to ensure the efficient collection, storage, and retrieval of data across the three components of the project.

# Task 3: Develop a data privacy protocol for all personal data in the hands of the project

Under the supervision of the RUSLP Project Manager, the Data Management Specialist will develop a data privacy protocol for all personal data in the hands of the project and:

- i. Should maintain the strictest confidentiality of all personal data collected.
- ii. Shall ensure that any personal data collected or managed by the project is in line with the data privacy laws of Sierra Leone and in line with World Bank Guidelines on Data Privacy.
- iii. Shall Ensure that data and its analysis do not contain personal information and are validated by RUSLP before sharing with external parties;
- iv. Shall ensure the quality and accuracy of technical information provided as well as the confidentiality and protection of collected information.

## Task 4: Identify spatial data infrastructure to be built upon

Under the supervision of the RUSLP Project Manager, the Data Management Specialist will identify spatial data infrastructure to be built upon by:

- i. Assess if there are existing online spatial data platforms in use by the government where spatial data generated by the project can be uploaded.
- ii. Or if no suitable platform is identified, then develop such a platform, with a clear institutional and sustainability plan.

### Task 5: Develop a public data-sharing platform for all open data

Under the supervision of the RUSLP Project Manager, the Data Management Specialist will be responsible for developing a public data-sharing platform portal that can facilitate the distribution of open data by:

- i. Providing an easy-to-access, searchable hub for multiple spatial datasets by using open-source software and should ensure that as much data as possible, generated by the project is made publicly available online and in a user-friendly format for interested stakeholders to download and use, in line with the RUSLP "data management and open data sharing protocol".
- ii. Developing comprehensive documentation users and administration manuals for all data management platforms and other user-friendly assets for wide and quick adoption by RUSLP and its designated M&E focal persons and ensuring that the digital platform is aligned to existing RUSLP and implementing partner's data management processes and software.
- iii. Collaborating with the RUSLP project stakeholders and the GEMS team in the World Bank to identify data needs, requirements, and standards;
- iv. Maintaining back-ups of the project-level data through secure databases including the development of detailed data dictionaries and metadata that are consistent across different project components;
- v. Routinely Clean, validate, and standardize project site-level data to enhance accuracy and reliability;
- vi. Developing data quality assurance procedures (validation criterion) and conduct regular data audits to identify and address discrepancies or errors;
- vii. Supporting the preparation of project reports, presentations, and publications by providing data analysis and insights.
- viii. If there is data that may not be publicly shared, the Data Management Specialist should develop a password protected data sharing platform for all data with access restrictions.

# Task 6: Capacity building and technical support to PMU and government stakeholders by providing:

- i. Support to the Project M&E team in enhancing the Project activity monitoring and evaluation platform used to collect and visualise data from designated project focal persons reporting on subproject activities
- ii. Support in developing an archive of reports
- iii. Training local government officials and staff of the Ministry of Lands, Housing and Country Planning
- iv. Training the PMU including the M&E specialist who will be the focal person to administer the Platform and designated M&E focal persons at the beneficiary Councils on how to use the platform

# 1.0.Minimum Required Qualifications and Experience

### 1.1.Academic Qualification

A master's degree in data management, computer science, Geographic Information Systems, Information Technology, Management Information Systems, Data

Science, Database Management Systems or a related field with <u>10 years</u> of Experience in Data management systems and designs.

### 1.2.Proven Experience

- a. Demonstrable knowledge of 10 years and proven experience in Spatial and non-spatial database management, spatial and non-spatial database design, and data analysis, preferably in the context of development projects or international organizations.
- b. Strong knowledge and hands-on experience of data governance and data management concepts, approaches, and tools and the role of data governance in the successful implementation of data strategy.
- c. Strong Proficiency and proven experience in the use of data management tools and software, such as SQL, Excel, Kobo Collect Toolbox, Survey Monkey, ODK, Power BI, SPSS, R, Python, Microsoft 365 and other relevant applications.
- d. Strong Proficiency and proven experience in the use of Geographic Information Systems and Remote Sensing tools and software, such as ArcGIS Desktop 10.0<sup>+</sup>, Quantum GIS, MapInfo, ERDAS Imaging, TNTMiips, Global Mapper, Grass GIS, Open-Source GIS Applications and other relevant applications.
- e. Experience working with international metadata and data exchange standards like SDMX, ISO19139/19115, DDI.
- f. Hands-on experience in ETL, management and visualization of diverse data sources and large datasets.
- g. Demonstrated experience in working with stakeholders to understand their data requirements and communicating these to inform technical solutions.
- h. Ability to effectively challenge all levels of an organization and offer value-add solutions to meet data governance objectives. Strong experience in stakeholder engagement and people and relationship management is desired.
- i. Advanced analytical, problem-solving, negotiation, and organizational skills with demonstrated ability to multi-task, organize, prioritize, and meet deadlines.
- j. Collaborative team player who is detail-oriented and focused on solution quality and execution.
- k. Ability to work independently with some level of ambiguity and juggle multiple demands.

### 1.3. Required Skills

**1.3.1. Data management Skills:** The Data Management Specialists should be able to design strategies for enterprise databases, data warehouse systems, and multidimensional networks. Set standards for database operations, programming, query processes, and security. Model, design, and construct large relational databases or data warehouses. Create and optimize data models for warehouse infrastructure and workflow. Integrate new systems with existing warehouse structures and refine system performance and functionality and familiarity with project management principles and methodologies.

- **1.3.2. Research skills:** Excellent Research and analytical skills are required, including a sound understanding of sampling frameworks and their application, an ability to analyze large data sets, as well as conduct temporal or spatial trend analysis.
- **1.3.3. Demonstrable experience in data science**: Excellent data analysis skills.
- **1.3.4. Software skills:** Advanced knowledge of R, STATA, Python or equivalent statistical software. Proven knowledge of Microsoft Office including Word, Excel, and PowerPoint. Strong Proficiency and proven experience in the use of data management tools and software, such as SQL, Excel, Kobo Collect Toolbox, Survey Monkey, ODK, Power BI, SPSS, R, Python, Microsoft 365 and other relevant applications. Strong Proficiency and proven experience in the use of Geographic Information Systems and Remote Sensing tools and software, such as ArcGIS Desktop 10.0<sup>+</sup>, Quantum GIS, MapInfo, ERDAS Imaging, TNTMiips, Global Mapper, Grass GIS, Open-Source GIS Applications and other relevant applications.
- **1.3.5. Training skills:** Ability to conduct trainings and mentor teams and partners on assessment skills;
- **1.3.6.** Communication/reporting skills: Excellent communication and drafting skills for effective reporting; excellent communication and interpersonal skills with the ability to collaborate effectively with multidisciplinary teams and stakeholders. Fluency in English (written and spoken) is required. Knowledge of additional languages is an advantage.
- **1.3.7. Multi-tasking skills**: Ability to multitask with tight deadlines, on numerous research cycles;
- **1.3.8.** Level of independence: Strong existing ability to work independently in support of colleagues and partners; desirable.

### **2.0.Duration of the Assignment:**

The start date of the contract will be 1<sup>st</sup> September 2024, or soon thereafter. The contract duration will be 2.5 years inclusive of a 6-month probation period, renewable until the closing date of the project. The successful candidate is expected to work full-time, including traveling within the Western Area to project locations in the provinces.

The performance criteria that will be used to assess the performance of the Data Management Specialist at regular intervals and based upon which the Contract may be continued or terminated are the effectiveness, efficiency and quality of delivering on the Scope of services, duties and responsibilities and deliverables of the assignment.

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#### LANGUAGES

International Professional: Fluency (Level C) in English.

#### **REPORTING LINE**

The Data Management Specialist will report directly to the Project Manager and collaborate closely with all other project staff and stakeholders.

#### RESPONSIBILITY OF THE EMPLOYER

Facilities to be provided by the project during the tenure of service include:

- Office space with computer and furniture
- Email and internet access
- Required office stationery
- Photocopying and printing facilities
- Project Documents
- Administrative Assistant (who will support the PMU)
- Access to a vehicle and other logistics to facilitate regular field visits as may be required.

#### MODE OF APPLICATION

Applications in writing should be accompanied by up-to-date Curriculum Vitae and supporting documents (Note: do not send originals) with the names and addresses of three referees, one of which should be the last or current employer and addressed to:

Team Lead Project Fiduciary Management Unit Ministry of Finance 13 Howe Street Freetown, Sierra Leone

#### Or

By E-mail application as an attachment (including all supporting documents) to: procurement.pfmu@gmail.com and resilienturbanslp2019@gmail.com

Please indicate clearly on the envelope (in the case of hard copy application) or in the email subject heading and attachment (in the case of electronic applications) the post for which the application is made.

# Only shortlisted candidates will be contacted for an interview.

Please indicate clearly on the envelope (in the case of hard copy application) or in the email subject heading and attachment (in the case of electronic applications) the post for which application is made.

# QUALIFIED WOMEN ARE STRONGLY ENCOURAGED TO APPLY.

## **CLOSING DATE:**

The Closing Date and time for receipt of applications is  $2^{nd}$  August 2024.