



National Electoral Commission (NEC)

OAU Drive, Tower Hill

Freetown

Sierra Leone



INTERNAL MEMORANDUM

To: Executive Secretary

Thru: Ag. Director of Data Management and Voters Roll

From: Assistant Director of Data Management and Voters Roll

Subject: **Request for a Local Consulting Firm to support the Development of a Custom GIS-enabled Mobile and Web App to enhance Centre Verification and mapping exercise**

Date: 13th September, 2021

Cc: Director of Procurement and Logistics

Previously Centre Verification and Mapping exercises were conducted using handheld GPS Trackers to capture and manually record location coordinates and other relevant information on paper. Apart from the rigors encountered in transforming these records into a structured data format for analytical purposes, **the GPS coordinates for some centres were wrongly recorded and hence the finalized data were not anomaly-free.**

Therefore, as a commitment to evolving effective and efficient management of the Commission's data asset, the department of Data Management and Voters Roll requests the services of a local consulting firm to support the development and design of an effective web and mobile application that will ease the identification, verification, registration and mapping of Registration Centres around the country. Using this platform, the Commission and its stakeholders can identify the exact location of all registration/voting Centres scaled down from Region, District, Chiefdom, Ward and Sections while indicating where such attention is needed, as many previous centres may no longer be available or required relocation to fit the purpose of electoral operations.

The department will provide detailed system requirements specification and further assist in the development process.

Description of Requirements

Context of the Requirement	<p>The Centre Verification, Registration and Mapping (CVRM) software will be GIS-enabled Mobile and Web App for capturing and analyzing CVRM data for adequate placement of voter registration centres.</p> <p>The requirements are as follows;</p> <ul style="list-style-type: none">▪ Develop a user-friendly Web and Mobile Application▪ The application must have the ability to effectively record details and GPS locations of Voting Centres▪ Enable easy and secure access by Authorized End Users and the General Public to locate Voting Centres nearby or afar.▪ Capture relevant specific information about the basic amenities or features available in various Voting Centres▪ Record and submitting events in the Registration/Voting Centre such as violence, malpractice, etc.▪ Sending Automated SMS Notifications to authorized and dedicated persons▪ Sending Automated Email Notifications to specified email address as events occur in electoral operations▪ System should be accessible from anywhere and anytime with internet connectivity▪ Provide transparency, effective and real-time data transfer mechanisms.▪ Present relevant technical and non-technical reports on data received
Implementing Departments	Data Management and Voters Roll, and Operations departments

List and Description of Expected Outputs to be Delivered	Technology Requirements:	
	<ul style="list-style-type: none"> • Xamarin Android App • ASP.NET MVC 5 and WEB API (HTTP REST/RESTLESS) • Google MAPs API 	
	Frameworks	
	<ul style="list-style-type: none"> ▪ .NET Framework 4.6 ▪ Entity Framework (EF6), LINQ and REST (JSON) – Data Layer 	
	Deliverables	Timeline
	Design <ul style="list-style-type: none"> • Thorough understanding and design of UI/UX before actual development 	September 27 – 29 October, 2021
Development <ul style="list-style-type: none"> • Website, Web Portal, Mobile and Interactive GIS App 	October 1 – 25, 2021	
System Testing <ul style="list-style-type: none"> • Unit and Functional test and evaluation of the system 	October 26 – 27, 2021	
Project Submission and closure <ul style="list-style-type: none"> • Presentation of final deliverables to the Commission 	October 28 – 2 November, 2021	
Person to Supervise the Work of the Service Provider	The work will be closely overseen by the Assistant Director of Data Management and Voters Roll	
Expected duration of work	The duration of this assignment is for 35 days from 27 th September to November 1 st , 2021.	

<p>Qualification</p>	<p>Prior to the technical evaluation, proposals will be screened based on the minimum eligibility criteria mentioned below:</p> <ul style="list-style-type: none"> • Must be a local firm • Minimum of 6 years’ experience in system design, development and implementation • Have done adequately impressive work for other MDAs or private companies • Experience in development of distributed/scalable systems and high-volume transaction applications 														
<p>Team Composition</p>	<p>For proper execution of the project i.e., system development, the firm should submit curriculum vitae for at least the following HR positions as minimum project team requirements:</p> <table border="1" data-bbox="500 936 1417 1392"> <thead> <tr> <th>Position</th> <th>No. of Person</th> </tr> </thead> <tbody> <tr> <td>Project Manager</td> <td>1</td> </tr> <tr> <td>System Administrator</td> <td>1</td> </tr> <tr> <td>Database Administrator</td> <td>1</td> </tr> <tr> <td>Developer Android</td> <td>1</td> </tr> <tr> <td>UI/UX Designer</td> <td>1</td> </tr> <tr> <td>TOTAL</td> <td>5</td> </tr> </tbody> </table>	Position	No. of Person	Project Manager	1	System Administrator	1	Database Administrator	1	Developer Android	1	UI/UX Designer	1	TOTAL	5
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Project Manager	1														
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<p>Technical assessment</p>	<p>The technical evaluation will be based on a presentation of prototypes to demonstrate an understanding of the assignment & proposed solution design for the technical development.</p>														