



## TOR for End-to-End Technological Solution for COVID -19 Response Process Management

## Background:

Liberia reported its first confirmed case of the COVID 19 on 16 March 2020 in Monrovia, the country's capital. As of 3 May 2020, the country had recorded one hundred and sixty-six (166) confirmed cases of COVID-19 including eighteen (18) death (CFR=11.7 %) (Liberia sit rep 46) with over 1,286 contacts registered. Montserrado County the Epi-center of the pandemic with cases now confirmed in Nimba County, Margibi, Sinoe, Maryland and Grand Kru Counties.

In response to the pandemic, the Government led by the President, H.E. George Manneh Weah, established and empowered an Incidence Management System (IMS) to collaborate with partners to lead the COVID-19 response towards the eventual and speedy eradication of the virus from the country. The IMS Pillars include EPI Surveillance, Contact Tracing, Case Management/IPC, Laboratory, Infection Prevention and Control, Logistics & Supplies, Dead body Management, Case Investigation, Psychosocial, Risk Communication and WASH.

The rapid spread of the disease has overwhelmed the current "manual" processes for data management. Data collection from the multiple data points is delayed and incomplete. IMS Pillars are not receiving the data timeous fashion thereby impeding the response.

This TOR seeks a Firm to transition the current manual data management processes to automated processes through the utilization of appropriate technology.

### Timeframe

The estimated duration of the proposed contract is 30 days with expected start date on June 8, 2020.

### Goal

To improve Epidemiological Surveillance of COVID-19 nationwide through the use of appropriate technology for data collection and analysis.

### **Specific Objectives:**

Automate and make robust the daily monitoring of COVID-19 low risk and high-risk contacts;

- Employ enhanced technology to manage end-to-end data points (Case investigation, contacts tracing, Laboratory, POE, POC, Treatment Unit, etc) processes;
- Employ enhanced technology to receive, analyses and display real time data through visualizations.

## Specific Task

- Automate the case investigation processes;
- Generate contacts list and distribute to contact monitors immediately;
- Link cases to contacts;
- Manage the contacts monitoring processes with high degree of confidentiality;
- Link critical information (Contacts, Case investigation, specimen collection, lab results, Treatment, etc) in a timely fashion using online/offline data capture and transfers;
- Support multiple data entry channels including Kobo forms, Excel upload, and direct entry using builtin forms;
- Extend APIs for USSD and other third-party mobile apps and systems;
- Synchronize data caption from first responders and investigators and entered in a centralized database;
- Automate data analysis and analytics and produce alerts, reports, patterns, and graphs in close to real time for informed decision making by the authorities
- Correlates data from various management pillars via a simplified workflow
- Enhance data visualization for maximum productivity, speed and efficiency
- Training of all user points
- Archive the data in DHIS2 at the Ministry of Health
- Routine System Maintenance.

#### **Deliverables:**

S/N	Key Milestones/Deliverables	Estimated Number of Days	Indicative Deadline	Milestone Percentage
1	Application & Database Analysis/ UI/UX Designing Cloud-based Application Development/Mobile App Development	9 days	16 June 2020	30%
2	Android Development/Data Analysis Security & Quality Assurance/Logistics and Installation	9 days	25 June 2020	30%
3	Bug fixes, version release, upgrades, technical support Hardware installation	12 days	7 July 2020	40%
TOTAL		ı		100%

## Experience of the firm

- At least 3 years of relevant experience in the field required in system design/application.
- Track record in UI/UX design
- Previous experience with other national/international organization is helpful but not mandatory;
- Experience in the usage of computers and office software packages, good knowledge and experience in handling of web-based management systems;
- Demonstrated experience in designing and implementing communication and/or media outreach.
- Experience in Liberia context will be an Asset;
- Other relevant documents like Business registration of the company is Mandatory

## Minimum key professionals and their qualification/Experiences

#### Team Leader:

- Bsc/MSC in Computer Science
- Advanced Diploma in system design/application;
- Background in Web-based management System/System Architect
- Experience in Software/system design for other Institutions in Liberia and/or abroad;
- Experience in IT Solutions and Architectural design [IT related]
- 2-5 Years year work experience software application.

#### Lead Technician:

- BSc Computer Science;
- Advanced Diploma in system design/application;
- Experience in system design and analysis;
- Experience in system application Design and Development
- Experience in Mobile Application Development
- Experience System Development/UX/UI;
- 2-4 years of work experience.

## Competencies

- Demonstrated understanding of strategic system design;
- Excellent organizational skills;
- Excellent English writing and design skills;

- Demonstrated ability to meet deadlines and work under pressure;
- Participate effectively in team-based, information-sharing environment, collaborating and cooperating with others;
- Strong interpersonal skills, able to communicate and work with diverse people
- Focuses on impact and results for the client;
- Demonstrates integrity by modelling the UN's values and ethical standards;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability

# Language requirement

Proficient spoken and written English is mandatory.

# Reporting:

The selected firm will be required to submit reports of each deliverable to the EPI's Surveillance Lead.

### SUBMISSION OF PROPOSALS

Interested consulting firm must submit their information which describes their willingness and capability to perform the above service in terms of:

- i. Qualifications, experience and professional affiliation supported by copy of certificate of registration/ testimonials/ accreditation where applicable. Experience in Liberia context will be an Asset;
- ii. Availability of appropriate skills among staff, demonstrate names, professional qualifications, areas of competence and contribution of proposed key persons supported with Curriculum Vitae and Certificates;
- iii. Evidences of experience in knowledge of similar assignments and in similar conditions (name of assignment, name and address of client, value, period),
- iv. Technical proposal
- v. Financial Proposal
- vi. Copy of Business Registration Certificate or Equivalent;
- vii. Type and details (technical and financial) of 11 months maintenance contract or service level agreement. The maintenance will be part of a separate contract after completion of the assignment.