



Terms of Reference

Request for Consultancy	
Software Development for HIV Mobile Supervision Application Using DHIS2 Data Capture under the Kuunika – Data for Action Project	
Duration of the Assignment	September 3, 2018 to October 1, 2018
Reference Number	LIN2018/MOB/001
Deadline for Submission	August 31, 2018 (extended)

I. Organizational Context and Scope

Background

Luke International (LIN) is a non-profit Norwegian organization registered in the Central Coordinating Register for Legal Entities, Brønnøysund Register Centre, Norway in 1997. LIN started its diaconal work and development projects in Malawi in 2008 and signed a formal Memorandum of Understanding (MoU) with the Government of the Republic of Malawi (acting through its Ministry of Health), on 2009.03.18 and is recognized as an International NGO with the Council of Non-governmental Organizations of Malawi (CONGOMA); registration no.: C 449/2009.

LIN has three working arms in Malawi: (1) Health Information System Strengthening (2) Research & Capacity Building, and (3) Community Development. Some of the major work that has been carried out includes the support to 20 health facilities in the Northern region for the implementation of National Electronic Medical Records Systems, development and implementation of electronic disease surveillance systems, and streamlining and inter-phasing information systems across the patient care continuum; teaching and research collaboration with local and international universities in the areas of biomedical sciences, epidemiology, disease surveillance and eHealth; and supporting community development programs in Mzuzu for people living with HIV (PLHIV), providing scholarships to vulnerable students, school and community projects in water, sanitation and health (WASH).

Overview of Kuunika Project

The Kuunika Data for Action Project is a 4-year project funded by the Bill & Melinda Gates Foundation that was launched in November 2016. Kuunika means “to bring to light” in Chichewa. The project’s ultimate goal is to improve planning, performance, and quality of health services provided with better use of information. In practice, the project will test innovative methods at national, district, facility, and community levels to better understand what works and what should be scaled. HIV is the



leading cause of death in Malawi and the country has developed a national HIV response that maintains strong data collection and reporting systems. As such, the project will focus on HIV as the first 'use case' for project activities, with a goal of leveraging investments for the broader health system and replicating successful efforts in other, high-burden disease areas.

A consortium of four organizations - consisting Lighthouse Trust (LHT), Baobab Health Trust (LHT), Luke International – Norway (LIN) and International Training and Education Center for Health (I-TECH) - with technical support from Cooper/Smith (who is funded through a companion grant) is strategically formed to meet the range of technological innovations, knowledge translation, and health system strengthening needs of the Ministry of Health (MOH) in Malawi. The consortium supports the Ministry of Health (MOH) to lead this work and collaborate with several departments within the MOH, including the Directorate of Planning and Policy Development (DPPD), Central Monitoring and Evaluation Department (CMED), Quality Management Directorate (QMD) and Department of HIV and AIDS (DHA).

The program focuses on (1) enabling health data systems to generate quality (complete, accurate and timely) HIV related health data across national, district, facility and community levels of care, (2) increasing data demand, access and use by stakeholders at all levels of the national HIV related health response, and (3) strengthening the GOM's data governance structure in order to implement and enforce coherent data collection and use policies and practices.

HIV Mobile Supervision Mobile App

The Department of HIV and AIDS (DHA) conducts quarterly supervision activities in all major health facilities within Malawi. It is a data collection process that involves teams of clinical officers, programme officers, nurses and medical assistants. The collected data is then captured into the DHA Management Information System (DHAMIS) to produce reports for different stakeholders. There are other reports that are generated to improve prevention and treatment programs, the reports also helps DHA in logistics, planning, management and day to day operations.

LIN in coordination with DHA has been tasked to co-develop a mobile solution for the quarterly supervision exercise that is currently conducted manually. The tool will enable the supervision data collectors to enter data directly into mobile devices, thereby reducing the need for back data entry and duplication of tasks. The supervision application is currently being developed on the DHIS2 Data Capture platform.

Upon this background, LIN is seeking to recruit a consultant to support the software development team to complete specific tasks that is required to fast track the completion of the tool.

II. Responsibilities and Accountabilities

Key Deliverables

The successful consultant will be expected to provide the following key deliverables:

- Design of dynamic tabular layouts based on row x column combinations



- Design of data entry cells on the tabular layouts
- Linkage of data entry cells to field adapters using unique IDs
- Definition of Java classes for the data entry cells
- Design of data display cells on the tabular layouts
- Nested design of data entry cells and data display cells on the tabular layouts
- Design custom adapters in Java for the tabular layouts

III. Tender Process

For individuals that are interested in tendering for this work please submit the following:

- 1) Curriculum Vitae detailing past similar experience and technical skills
- 2) A minimum of 3 references from former clients/organizations
- 3) Quotation of fixed rate for one month delivery

Interested parties should submit applications to info.malawi@lukeinternational.no

Applications should be submitted by: **29th August 2018**. For further information please contact Mr. Takondwa Makawa (Mobile Developer) at mtmakawa@gmail.com

IV. Requirements

Programming Languages:

- Java

Experience:

- Android Nested Layouts
- eXtensible Markup Language (XML)
- Custom Adapters