Statement of Work – A Phased Implementation of OpenLMIS in Somalia

Technical assistance to support the phased implementation of a tailored OpenLMIS in Somalia. The first phase will cover the gathering of requirements to facilitate an implementation of OpenLMIS. The second phase covers the limited pilot of OpenLMIS in the capital regional of each state[1] with 13 unique users[2] covering all malaria and HIV products for a period of 6 months. The third phase of the project will see OpenLMIS expanded to approximately 26 regional facilities, 65 unique users, across all non-vaccine, non-nutrition programs. UNICEF requests VillageReach's technical assistance based on its long-standing experience and know-how in OpenLMIS system design and support in Mozambique, Benin, Tanzania, Malawi, and other countries as well as our growing body of work related to Global Fund priorities. Identification of a capable local implementation partner to assist with essential on the ground activities is an important dependency on our ability to execute on this statement of work.

Context

The country of Somalia consists of Federal Government administered areas as well as 2 autonomous states – Somaliland and Puntland. Each of the 3 states has its own Ministry of Health and supply chain unit ("SCU") and is geographically subdivided into regions and districts. Somaliland has 6 regions, while Puntland has 8, and the FGS has 12, for a total of 26 regions. Commodities are pulled from both state-run warehouses[3] as well as zonal WHO warehouses[4] to the regional level. At the regional level, supplies are then pushed via truck directly to some 900 service delivery points (bypassing the district level – which is not presently functional) which serve the general public by local NGOs. However, there is a desire to change last mile delivery to a requisition based system in the future.

Currently, procurement of supplies for the medical commodity supply chain in Somalia is operated by multinational partners through program verticals. UNFPA procures supplies for the reproductive health program. World Vision procures commodities for the national TB program. UNICEF procures commodities for malaria, essential medicines, and HIV/AIDS[5]. Each of the partners' organizations operate within their verticals across all three states and utilize local NGO partners for delivery below the regional level. Stock and consumption data then makes its way back to the regional then central levels on a monthly basis. The regional officer is the ultimate decisionmaker on how commodities will be fulfilled and the SCU is the ultimate recipient of aggregate data.

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[1] The capital region of each autonomous state in Somalia (Garowe in Puntland, Hargeisa in Somaliland, and Mogadishu in Somalia) will be the site of the three regional pilot implementation

[2] Two users at each regional facility (3 x 2 = 6), 3 SCU LMIS expert users, as well as 4 users belonging to each of the partner organizations – UNICEF, UNFPA, WHO, and World Vision

[3] State warehouses are responsible for fulfilling products within malaria, HIV, family planning, nutrition, and essential medicines programs

[4] WHO warehouses are located in Mogadishu, Garowe, and Hargeisa and are responsible for fulfilling TB and some laboratory products

[5] This includes voluntary counseling and testing, prevention of mother to child transmission, and ARVs

The partners have recently agreed on a harmonization of their paper processes, resulting in one *Stock Status and Reporting Order Form ("SSRO")* across all programs. Furthermore, the partners are interested in building upon this success by digitizing the harmonized process via an implementation of OpenLMIS. The primary goals of an OpenLMIS implementation is to gain visibility into aggregate consumption & stock levels at the facility (periodic), regional, and national levels across all programs (excepting vaccines & nutrition). Furthermore, the ability to perform real-time inventory management as well as to requisition (at the regional level and above) are secondary goals.

There is an extremely light technology footprint in the health space in Somali. No national level Enterprise Resource Planning (ERP) exists excepting IPSAS, which operates at each zonal WHO warehouse. Nor is there a national Health Management Information System (HMIS) – though an implementation of DHIS2 is currently underway. Aggregation of SDP data at the district level currently takes place on excel spreadsheets which are emailed to the national level. A master facility list exists as an excel document and a master product list for all programs is expected to be finalized prior to March.

Objectives

The objective of this project is to achieve a phased implementation of OpenLMIS as the national LMIS in Somalia. The narrative below describes specific objectives for each phase while the following table describes discrete objectives, categorization, descriptions, and responsibilities for each deliverable. This serves as an outline with reflection on outcomes between phases guiding the following phases.

Phase I

The objective of the initial phase of this project is to gather in depth requirements on the various supply chain workflows that OpenLMIS or another LMIS would have to support in Somalia. This process would identify all system personas as well as their interactions with the system and each other. The outcome of this phase will be list of actionable user stories that can be compared against OpenLMIS or other LMIS systems feature list and backlog to ascertain fit for the Somali use case. The desired start date for such an investigation is March, 2017.

Phase II

The objective for the second phase of the project is to configure, customize, and deploy a limited implementation of OpenLMIS in the capital region for each state in Somalia. The implementation would consist of configuration and customization of the OpenLMIS platform to the requirements found in Phase I. In addition to these activities, 13 unique users would be trained on proper use of the system in order to handle the malaria and TB supply chains for the Mogadishu, Hargeisa, and Garowe regions. Preparation for the pilot is expected to take 3 – 6 months with the pilot period running for approximately 6 months.

Phase III

The objective of the final phase of this project is to introduce a nation-wide deployment of OpenLMIS in Somalia. The final scope of an OpenLMIS implementation in Somalia will be across the family planning, TB, malaria, essential medicines, and HIV/AIDS programs. Additional users from each of the remaining 23 regions will be trained on the proper use of OpenLMIS and granted access to the system.

All 900+ service delivery points would be represented in the system, however individuals at the regional level – since this is the first level of the supply chain with reliable internet access – would enter data sent via the paper process from the service delivery point[6] into OpenLMIS. The regional user would then perform fulfilment to SDPs, noting the issues via stock management functionality in OpenLMIS. The regional level would perform their own requisition through OpenLMIS with electronic approvals occurring at the SCU and fulfilment taking place via state and zonal WHO warehouses, depending on program.

Phase	Objective	Category	Responsibility
I	Gather requirements	Requirements gathering	OpenLMIS Community & local implementing partner
II	Develop additional functionality required for the Somali context (high level): • Aggregate consumption report • Other reports • Other customizations discovered during requirements gathering process	Software development and deployment	OpenLMIS Community
II & III	Configure OpenLMIS to support the Somali context: • Support requisition system from the regional to central level • Configuration 900+ SDPs, 26 regional, & 3 central facilities • Configuration of family planning, TB, malaria, HIV/AIDS including voluntary counseling and testing, prevention of mother to child transmission, and ARVs), as well as essential medicines programs • Configuration of products by programs and facility • Initiation of electronic stock cards for all program-products • Appropriate authorizations & approval hierarchy • Appropriate user configuration and permission set for approximately 65 users	Software configuration	OpenLMIS Community
II & III	Training of trainers for local implementing partner	Training of trainers	Local implementing partner
II & III	Tier 2 & tier 3 support	Software	Local implementing

[6] There is potential to extend access to the facility level in the future via a tablet version of OpenLMIS that syncs via mobile network, however, this extension is not included in this scope of work.

		support	partner
II & III	Limited tier 1 support for bugfixes and enhancement requests	Software support	OpenLMIS Community

Deliverables and Timelines

The following is a phased guide to deliverables for this project. Deliverables & Timelines are estimated based on current knowledge of the Somali context and will evolve over time.

Phase I / 2 months

Detailed requirements outlining use cases for the Somali health commodity supply chain as well as user stories sufficient to design an LMIS in Somalia. This work will be performed by VillageReach, with transportation and scheduling support from a local partner and should be complete in approximately 2 months.

Phase II / 9 – 12 months

A functional pilot LMIS configured to the Somali context in the following manner:

- Support requisition system from the regional to central level
- Configuration of 3 central facilities, 3 regional facilities, and all SDP that report to those facilities
- Configuration of the malaria and HIV/AIDS programs
- Configuration of products by programs and facility for malaria & HIV/AIDs programs
- Initiation of electronic stock cards for all program-products
- Appropriate authorizations & approval hierarchy
- Appropriate user configuration and permission set for approximately 13 users
- Training on proper use of the system to those 13 users

Support for a tailored LMIS implementation for the 6-month duration of the pilot

- Tier 1 support provided by VillageReach or another OpenLMIS Community member
- Tier 2 & 3 support provided by a local implementing partner

Once configuration, customization, and training have taken place, the pilot will run for approximately 6 months. In total, this phase will take 9 – 12 months to perform.

Phase III / 12 months

A functional LMIS configured to the Somali context in the following manner:

- Support requisition system from the regional to central level
- Configuration 23 additional regional facilities as well as all facilities that report to those facilities
- Configuration of family planning, essential medicines, TB, and laboratory programs
- Configuration of products by programs and facility for family planning, essential medicines, TB, and laboratory programs
- Initiation of electronic stock cards for all new program-products

- Appropriate authorizations & approval hierarchy
- Appropriate user configuration and permission set for approximately 46 additional users[7]
- Support for a long-term implementation of OpenLMIS

Budget

The following budget estimates are based on very high level requirements and VillageReach's experiences piloting similarly sized projects in other contexts. They cover the human resources as well as travel costs for VillageReach (or another member of the OpenLMIS Community) and assume that there is a local implementer able to handle all other expenses (including but not limited to hardware, organizational, training) required for a successful deployment. The activity most susceptible to budget variance will be software development, which could be affected by:

1. Discovery of requirements during phase I
2. Allocation of in-house development vs. subcontracted development resources

These values should be seen as an order of magnitude assessment pending more in-depth requirements.

Phase I Costs

Requirements Gathering	**Total**
On-Site Requirements Gathering Travel Costs (4 wks. In Somalia)	$8,574.00
Technology Manager - On-Site in Somalia to gather requirements	$14,000.00
Technology Director - Remote Support	$900.00
Total for Requirement Gathering Workstream	**$23,474.00**

Requirements Development	**Total**
Technology Manager - Backlog creation & prioritization	$7,000.00
Technology Director - Remote Support	$900.00
Total for Requirements Development Workstream	**$7,900.00**

Total Phase I Cost	**$31,374.00**

[7] Two users at each of twenty-three regional facility users (23 x 2 = 46)